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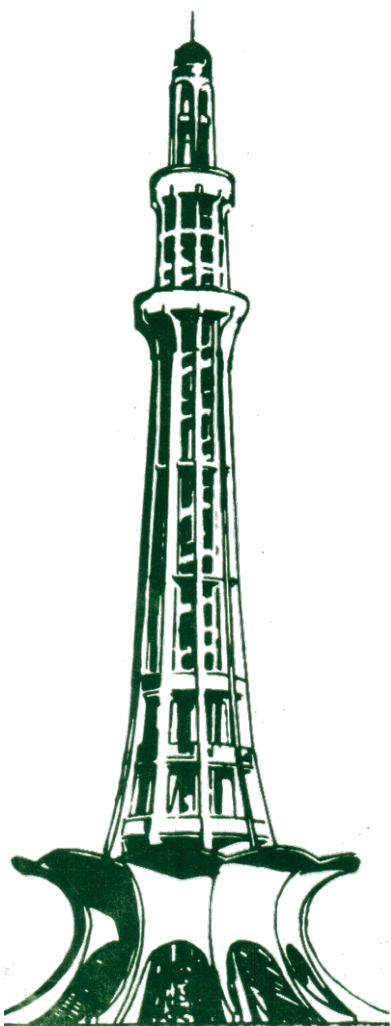
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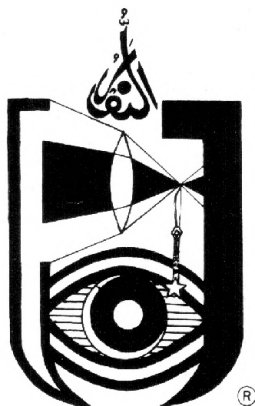
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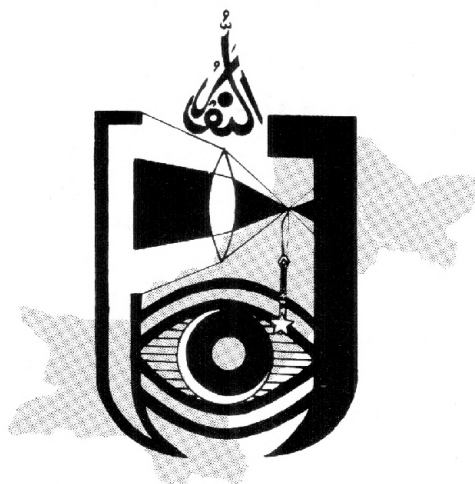
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Caterpillar Hair Conjunctivitis Nodosa

Khalid J. Awan, M.D.*
and
J. Reimer Wolter, M.D.

ABSTRACT: Conjunctivitis nodosa is a persistent or recurrent reaction in the conjunctiva caused by caterpillar hair. In some instances the offending material may be vegetable hair, synthetic fiber, or a minute piece of coal or rock. Clinically, a focal redness of the palpebral conjunctiva, excessive tearing, and punctate staining of the cornea are seen with no foreign body visible on external examination. Slit lamp examination is essential to recognize the hair embedded in the inflamed tissue. Histopathologically, abscess formation in the epithelial layer and subacute granuloma in the subepithelial layer are seen around the foreign body in earlier stages. The authors report 16 cases of localized conjunctivitis nodosa due to caterpillar hair and emphasize that this condition is much more common than is currently believed. (Pak J Ophthalmol 1: 157-160, 1985).

Hair of certain insects and plants may cause a characteristic nodular reaction in the ocular tissues.¹ If these hairs penetrate the eye, they set up a violent intraocular reaction with hypopyon, iridocyclitis, and nodule formation on the iris. The external involvement is called conjunctivitis nodosa, and the intraocular penetration, which usually leads to the loss of an eye, is called ophthalmia nodosa. Reports of both conjunctivitis nodosa and ophthalmia nodosa are rare,²⁻⁴ and only 7 cases were reported in over a century in England.⁵ Two recent reports implicated pieces of synthetic fibers as a modern cause of lesions resembling conjunctivitis nodosa.^{6,7}

Ophthalmia nodosa caused by intraocular caterpillar hairs is considered a rare disease.⁸ It poorly responds to a standard uveitis and endophthalmitis treatment with antibiotics, corticosteroids, and cycloplegics. The surgical removal of hairs, an extremely difficult task,

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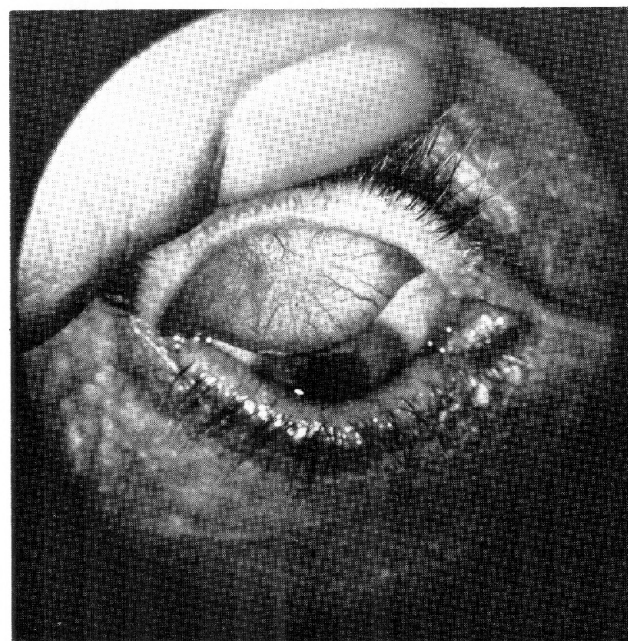


Figure 1. (Awan & Wolter): Right eye. Note an area of local reaction in the tarsal conjunctiva of the upper eyelid. Slit lamp examination revealed a caterpillar hair imbedded in the center of this area.

is necessary. However, recent advances in microsurgery and the advent of sodium hyaluronate allowed a satisfactory treatment of ophthalmia nodosa by a successful removal of many intraocular caterpillar

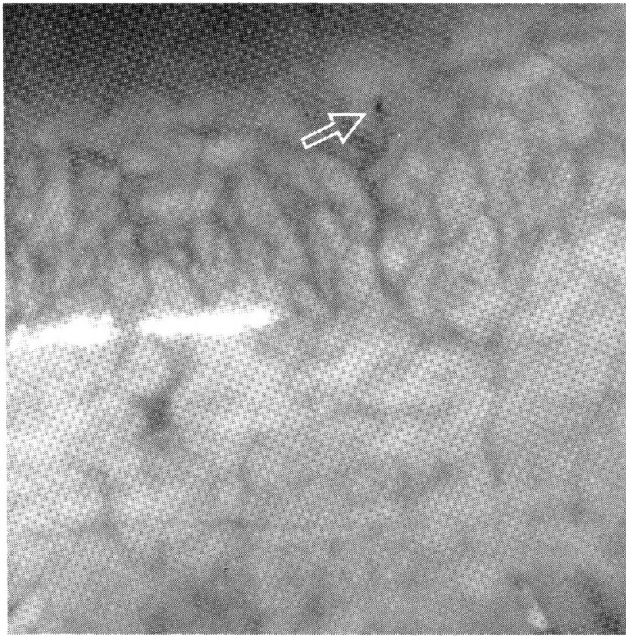


Figure 2. (Awan & Wolter): Right eye. Photobiomicrograph of the lower eyelid, showing the tip of a black caterpillar hair embedded in the conjunctiva. (Arrow)

hairs from the eye of a 9-year-old boy.⁹

The purpose of this paper is to discuss the incidence of conjunctivitis nodosa and to present its histopathologic features in the early and acute phase. In all, 16 cases of conjunctivitis nodosa were seen by one of us (K.J.A.) during the fall of 1984. The conjunctiva of either eyelid may be involved (Figure 1 & 2), but the involvement of upper eyelid appears to be more common. Because the history and the clinical features were similar in all patients, we present here only one representative case with histopathological studies.

A Representative Case Report

A 32-year-old white man was seen with pain, redness, and watering of his right eye. The symptoms had appeared eight days prior to his visit when he returned home from a hunting trip. He was seen by his family doctor 24 hours after the trouble started, and was given some eye drops. Two days after he started the use of drops, the symptoms subsided only to reappear the next day. This time the drops did not help, and his vision became blurry in addition to above mentioned complaints. He decided to seek our advice.

On examination his vision was 20/30 in the right eye and 20/20 in the left. The left eye was normal in all respects. The right eye was red and watery (Figure 3). The middle portion of the lower lid was swollen with a small bump-like area on its inner surface. Slit lamp examination of the lower half of the cornea showed an irregular epithelial defect that stained with fluorescein. The epithelial defect of the cornea reminded of the defects seen in recurrent erosions. Neosporin eye drops were prescribed every two hours during the waking hours. On the next day the patient called to state that his eye had started hurting badly, and that the drops were not helping at all. He was advised to come to the office.

A closer slit lamp examination showed a black hair-like object projecting from the center of the previously noted inflamed area of the conjunctiva of the lower eyelid (Figure 4). An attempt at removal of this foreign body with a fine forcep failed. Because of the reaction being limited around this linear foreign body and our past experience with such foreign bodies, the situation was diagnosed as

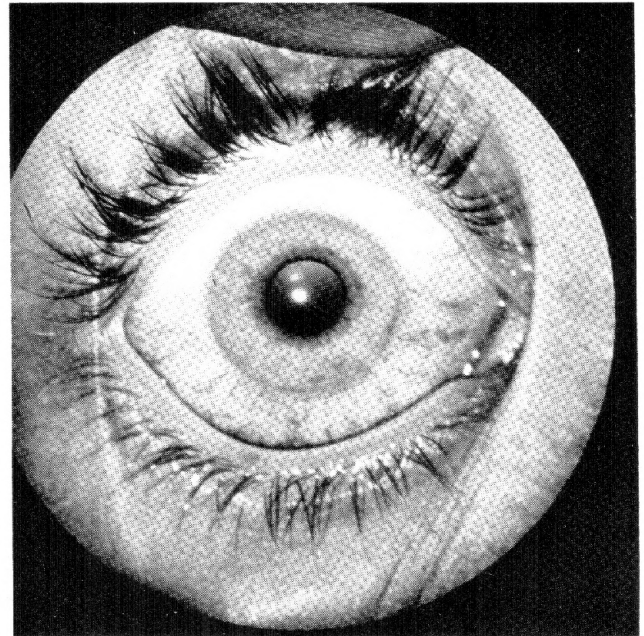


Figure 3. (Awan & Wolter): Case 1. Right eye. Eye has inferior redness, watering, and irregularity of the epithelium of the inferior cornea.

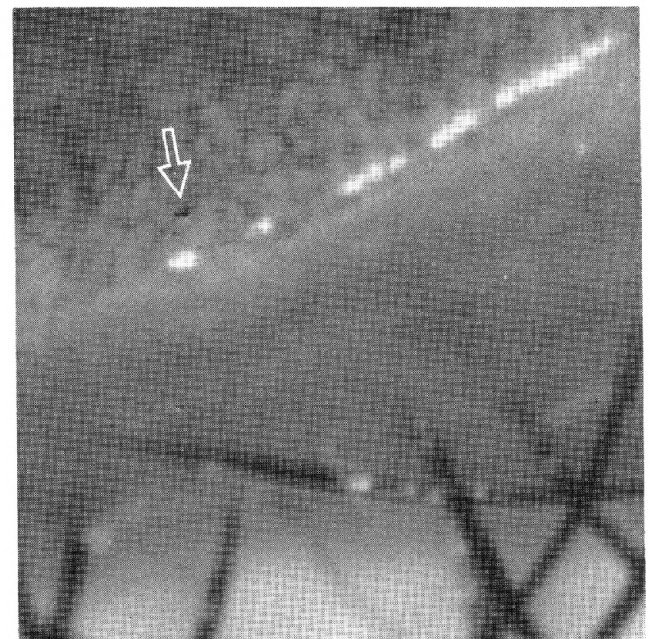


Figure 4. (Awan & Wolter): Right eye of the Case. Photobiomicrograph showing one end of the caterpillar hair in the conjunctiva (Arrow). The hair had become friable and could not be removed with forceps. An excisional biopsy was done. See Figures 5 and 6 for histopathology.

conjunctivitis nodosa due to caterpillar hair. The inflamed area with the hair in its center was excised under the slit lamp in a block and sent for histopathologic studies. The patient was kept on Neosporin eye drops. In two days all the symptoms and the corneal epithelial defect disappeared and the vision returned to 20/20 in the right eye.

HISTOPATHOLOGICAL FINDINGS

The excised piece of tarsal conjunctiva measured 1x1x1.3 mm. It was embedded in paraffin and cut in

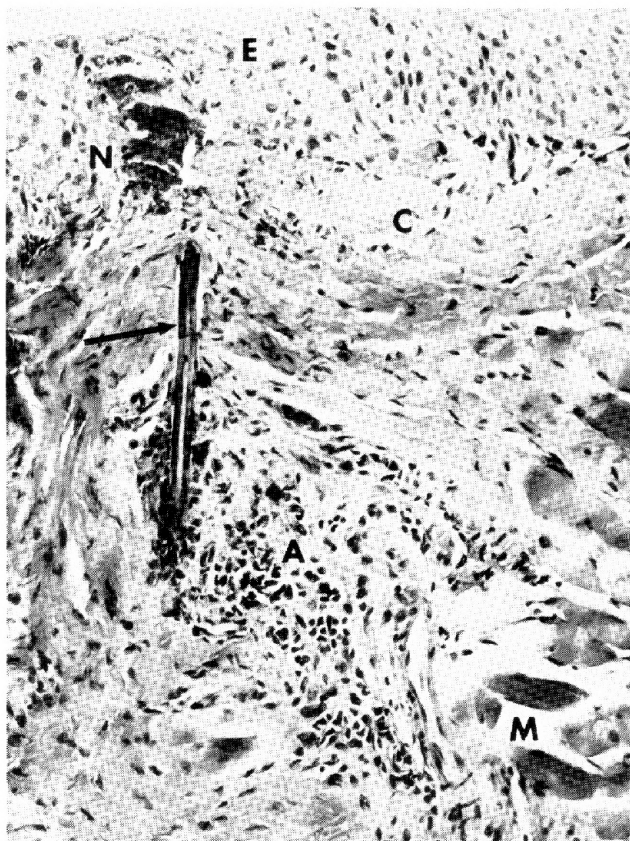


Figure 5. (Awan & Wolter): Continuous portion of caterpillar hair (arrow) in conjunctival connective tissue (C) with localized necrosis (N) at its entrance site in epithelium (E). Mononuclear inflammatory cells and occasional PMN's accumulated at penetrating point of the hair (A) next to bundles of striated muscle (M). - Paraffin section. H and E stain, photomicrograph X 150

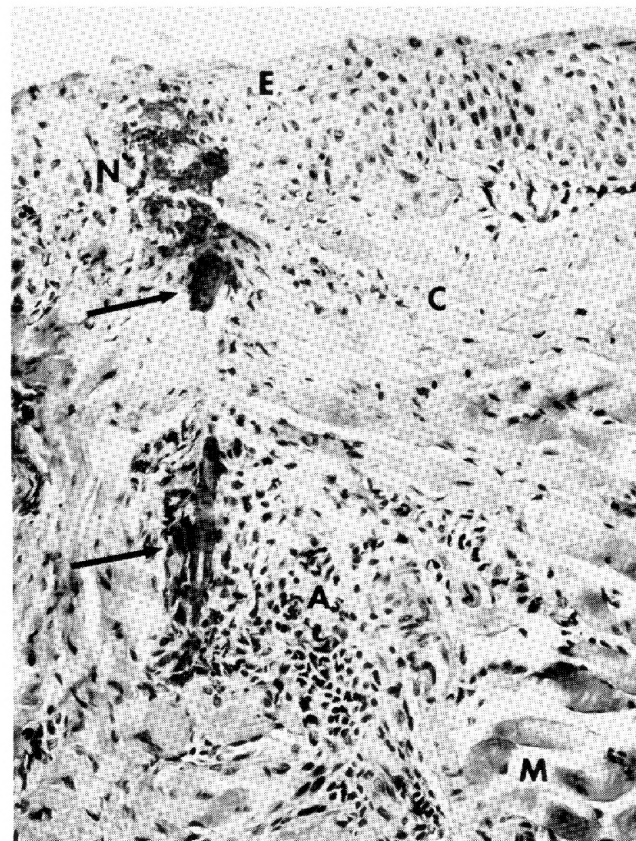


Figure 6. (Awan & Wolter): Marginal section of caterpillar hair with artificial fragmentation (arrows) seen in conjunctival connective tissue (C). Necrotic abscess (N) in epithelium (E), bundles of striated muscle (M), and abscess with PMN's and mononuclear cells around deepest penetration of hair (A). Paraffin section. H and E stain, photomicrograph X 150

serial sections. These sections show the epithelial surface of the piece to be covered by non-keratinizing epithelium. This has an area of localized thickening with degenerated epithelial cells and an accumulation of pus in the very center (Figures 5 and 6). A straight needle-like foreign body of dark brown color and round shape is found positioned at right angles with and directly beneath the epithelial basement membrane in the area of an epithelial abscess (Figures 5 and 6). The foreign body measures 0.48 mm in length and 0.032 mm in diameter. In its substance it is very well preserved and exhibits a smooth surface. In its course in the subconjunctival connective tissue the foreign body is surrounded by irregular accumulations of lymphocytes, macrophages, and few polymorphonuclear leucocytes. This cellular reaction is associated with some swelling of the subepithelial connective tissue around the foreign body.

The histopathological findings in these tissues give support to the clinical diagnosis of conjunctivitis nodosa caused by the presence of an isolated caterpillar hair in the subepithelial connective tissue.

DISCUSSION

It is extremely easy to miss the diagnosis of

caterpillar hair conjunctivitis if the physician is not aware of the entity or does not have a sufficiently high index of suspicion. Outdoor activity, watering of the eye with a stabbing sensation, injection of the palpebral conjunctiva restricted to one area (Figure I), alternating episodes of relief and recurrent irritation, as well as occurrence in autumn should make the ophthalmologist look for caterpillar hair with slit lamp. Once the hair is detected, it can be pulled out by a fine forceps (Figure 7). This results in a prompt and complete recovery. In most of our 16 patients, the diagnosis was made promptly because of our previous experience with this condition. The diagnosis in the first few cases was very difficult because of our lack of sufficient knowledge about this entity. We would like to emphasize that the caterpillar hair conjunctivitis is much more common and deserves a careful description in the textbooks of ophthalmology. An accurate diagnosis and treatment can save the patient a great deal of agony and incapacitation.

The cause of inflammation from caterpillar hair is probably twofold. The hairs of a caterpillar are known to be very toxic and may retain their toxicity for as long as four years.⁵ A toxic reaction is compounded by the mechanical injury of the ends and the barbs of the

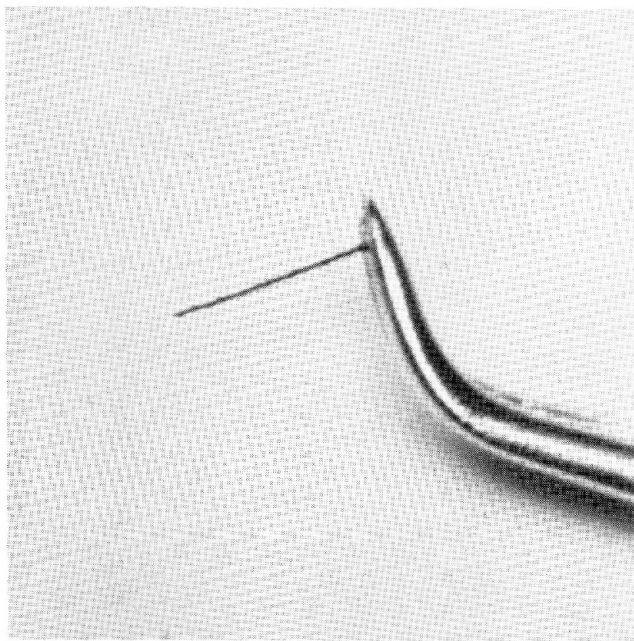


Figure 7. (Awan & Wolter): A magnified view of a caterpillar hair removed a day after it went in the eye. The hair becomes friable and smooth, without visible barbs, after about a week of remaining engulfed by the reaction.

hair. It is interesting that reaction to caterpillar hair is not as severe in animals as it is in man,² and in one study experimental attempts failed to produce ophthalmia nodosa in the eye of rabbits employing the same caterpillar hair which caused devastating ophthalmic nodosa in a man.⁸ This could be a result of inherent or acquired immunity to the toxins of the caterpillar hair in animals. Conjunctivitis nodosa or ophthalmia nodosa may also be caused by vegetable bristles of many plants, such as burdock (*Arctium minus*).³ In the case reported here, the cause was probably a hair from the common woolly-bear caterpillar (*Arctia caja*).

The caterpillar hairs and the hair from plants are usually equipped with very fine barbs that are pointed all in the same direction at an angle to the shaft. When a hair gets into the tissues, it keeps burying itself

deeper and deeper, the barbs being directed opposite to the direction of the movement of the hair. The hairs may migrate so deep as to gain an intraocular position, with resultant severe uveitis that may destroy the eye. On some instances, however, the hair may be tolerated and engulfed into fibrous coat without causing any serious problems.²

Twelve of our 16 patients, a majority, had the upper eyelid involvement. In most cases the patients have been treated with some antibiotic drops for several days before seeking our care. In all of these patients no direct handling of caterpillars or plants was reported. The hair probably were airborne and gained entry into the eye accidentally.

Histopathological study revealed in one of the present cases an acute and subacute reaction rather than the chronic reaction reported in other publications. The reason for this difference probably is the time of biopsy, which in our patient was taken about a week after the first clinical diagnosis of inflammation.

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Ophthalmic "Past-Pourri"

Automated Cataract Extraction Without Anesthesia

A century ago, the cataract surgery was performed without any anesthesia — and many times without any help from the surgeon. — Editor.

".... and the incision was made secundem artem (Grafe), but the patient, whose orbicularis was extraordinarily strong, strained, and out came the lens in the capsule before an iridectomy was made. The wound gaped widely, at least 7 mm., and was filled with vitreous and proptapsed iris. The eye was quickly closed and bandaged."

A. Blitz
Operation For Cataract
Trans. Amer. Med. Ass., — 1879
(1-9-235)



Recurrent Sectorial Corneal Endotheliitis Associated with Dental Abscess

Hamid M. Malik, L.D.S., R.C.S.*
and
Muhammad Saeed, M.B., B.S.*

ABSTRACT: A 46-year-old woman developed recurrent attacks of sectorial corneal endotheliitis in her left eye that coincided with simultaneous recurrences of dental abscess. The corneal endotheliitis each time responded to topical corticosteroids, but complete recovery occurred when the abscessed tooth was removed. (Pak J Ophthalmol 1: 161-163, 1985).

Recently an entity called presumed autoimmune corneal endotheliopathy,¹ acute idiopathic corneal endotheliitis,² idiopathic sectorial corneal endotheliitis,³ or progressive herpetic corneal endotheliitis⁴ has been described. The condition is characterized by corneal stromal edema, a migratory line of keratic precipitates in the involved area, and endothelial swelling and damage limited to the swollen cornea. The precise etiology of this condition is yet unknown. We report recurrent sectorial corneal endotheliitis associated with a chronic dental abscess.

CASE REPORT

A 46-year-old woman with a chronic tooth abscess and recurrent acute bouts complained of blurred vision in her left eye. She reported past episodes of blurriness of vision in the left eye that cleared up spontaneously. Except for mild arthritis, she was in good health, and had no allergies.

The eye examination showed that her vision was 20/20 in the right eye and 20/30 in the left without any refractive error. A mild injection was present in the perilimbal area extending from 9 to 12 o'clock in the right eye. The cornea adjacent to this area of redness

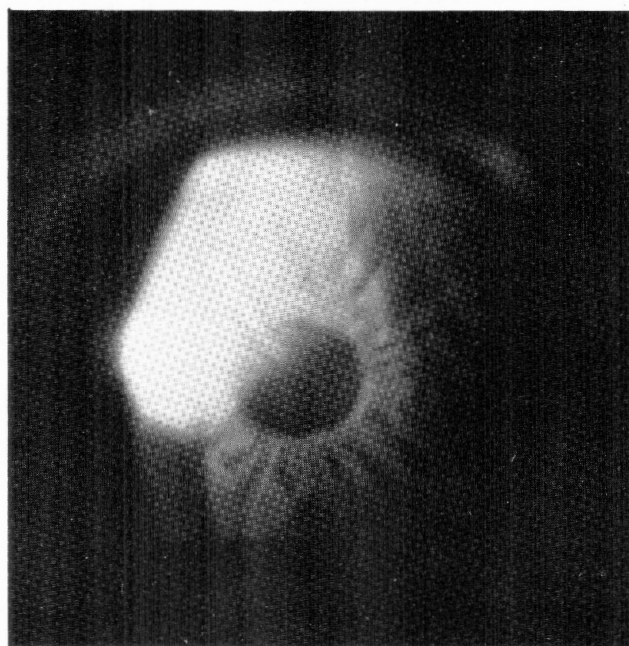


Figure 1. (Malik & Saeed): Left eye. Note the haziness of the cornea sharply limited to 9- to 12 o'clock sector. Radially orientated folds in Descemet's membrane of the swollen stroma are clearly visible. Higher magnification showed many keratic precipitates and guttata-like endothelial changes. In the episode that followed this one, there were definite areas of endothelial cellular loss.

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was edematous, but the pupillary area was clear. Biomicroscopic examination showed localized edema of the deeper layers of corneal stroma with guttata-like changes in the endothelium of the involved area. The maximum changes were in the deepest layers of the

stroma. A few keratic precipitates were seen attached to the swollen endothelium. The remaining cornea was normal. No reaction could be detected in the anterior chamber. Descemet's membrane had distinct radial folds in the area of corneal edema. The patient was evaluated systemically for syphilis, tuberculosis, and herpes infections. All were negative. A two week course of topical corticosteroids cleared the condition. Three months after this episode, the patient had another similar attack. This time the edema had crept further toward the pupillary border (Figures 1 and 2). The clinical features were identical to the ones previously described. Topical corticosteroids again completely cleared up the condition.

After another three months, the patient returned with severe loss of vision in the left eye. On examination the vision had been reduced to 6/60 (20/200) and the haziness of the cornea was covering the pupillary area. It was noted that keratic precipitates had increased in number and the endothelium showed circular areas of cellular loss. Also, a few cells were noted in the anterior chamber without any flare. The intraocular pressure was 18 mm Hg in the right eye and 19 mm Hg in the left. On gonioscopic examination, the angle appeared heavily pigmented and there were patent blood vessels present in the deepest layers of edematous stroma (Figure 3).

During this latest examination, the patient appeared unusually tense. On questioning she reported that she had severe pain in her tooth. Following investigation confirmed that she had had attacks of tooth ache, either just prior to or during the past episodes of visual loss in her left eye. The extraction of the abscessed tooth was carried out and the usual topical corticosteroids employed in the treatment of endotheliitis. The vision gradually improved to 6/6 (20/20) in the left eye, at which point treatment was discontinued. The patient has remained symptom free for the last year and a half, and there is no residual corneal opacity.

COMMENTS

Khodadoust and Attarzadeh¹ described an unusual recurrent bilateral corneal stromal edema progressing centrally from the periphery in the healthy eyes of two men. In each instance, the corneal edema was accompanied by migratory linear keratic precipitates, destruction of the endothelium and minimum reaction in the anterior chamber. History and laboratory tests for herpetic disease, syphilis, or trauma were absent. Because of a similar and almost pathognomonic clinical sign of migratory endothelial rejection line in corneal allograft rejection,⁵ the presence of macrophages and lymphocytes in the aqueous aspirate, and response to corticosteroids, these authors concluded that this phenomenon may be an autoimmune process. The keratic precipitates do not by themselves lead to endothelial damage or the corneal edema.¹ These authors felt that their cases were not herpetic, because the posterior herpetic keratitis almost always starts in the central cornea. Our patient differed from their patients in that the disease was strictly unilateral, the keratic precipitates did not have linear orientation, and the corneal involvement was sharply sectoral.

Herpetic etiology for endotheliitis has been suggested.^{2,3} The progressive corneal endotheliitis has been found to be definitely associated with herpes simplex virus type I uveitis in at least one case.⁴

Keratitis linearis migrans, a rare manifestation of ocular syphilis, may be outwardly confused with the corneal edema and endotheliitis described here.⁶ Acute idiopathic corneal endotheliitis is deep, sectoral, and begins at the limbus; whereas keratitis linearis migrans involves all layers of the cornea and

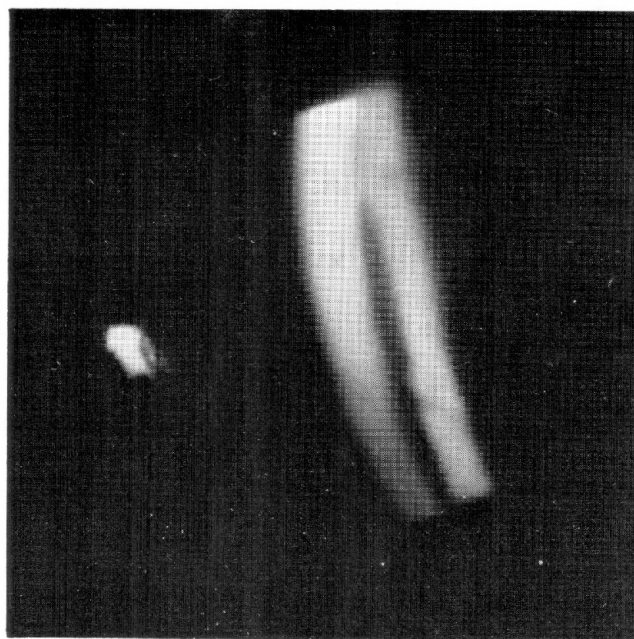


Figure 2. (Malik & Saeed): Photograph of biomicroscopic section showing localized edema of the deeper corneal stroma.

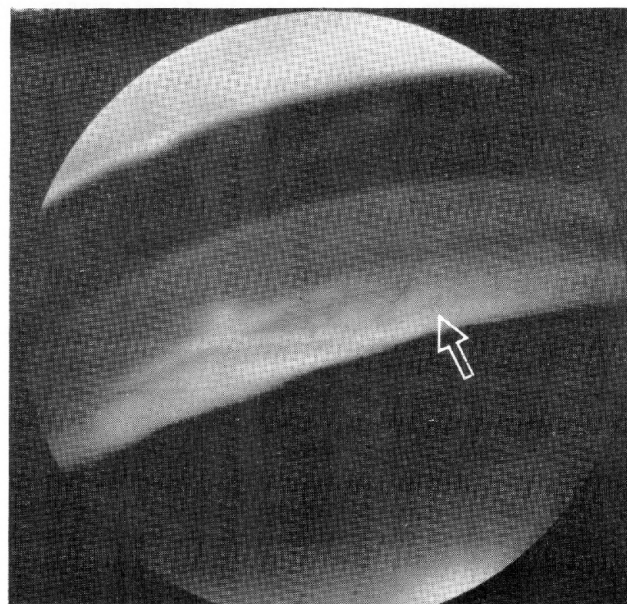


Figure 3. (Malik & Saeed): Goniophotograph of the involved area. Note the deep pigmentation of the angle and deep stromal blood vessels with their irregular zigzag course.

may leave permanent opacity on resolution. In our patient, the corneal edema cleared up completely without any permanent opacification and the serology for syphilis was negative.

Sutcliffe and Baum² suggested that acute corneal edema in patients without known prior corneal disease or trauma may be classified into: 1) corneal edema from severe iridocyclitis, 2) herpetic endotheliitis, 3) presumed autoimmune corneal endotheliitis, and 4) acute idiopathic corneal endotheliitis. In our patient

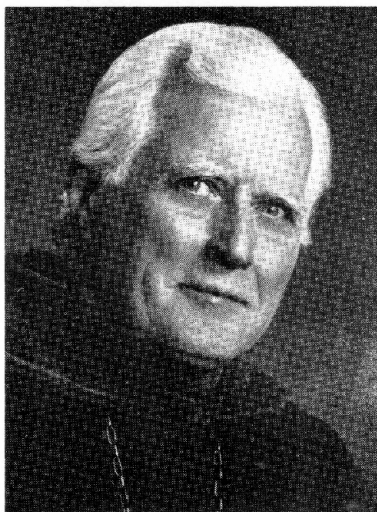
the clinical picture resembled the last condition, but it was closely associated with simultaneous attacks of acute dental abscess. Our report is the first report of such a relationship between the acute corneal endotheliitis and the dental abscess. We advise a dental checkup in all cases of idiopathic endotheliitis.

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Achievements Honored



Frank W. Newell, M.D.

Frank W. Newell, M.D., the Consultant Editor of THE PAKISTAN JOURNAL OF OPHTHALMOLOGY, was presented a *Festschrift* issue (July, 1985) of THE AMERICAN JOURNAL OF OPHTHALMOLOGY in honor of his 20th year as the Editor-in-Chief of AJO. It is not just his editorial ability that sets Dr. Newell apart from other leaders of ophthalmology. In addition to his monumental task as the Editor-in-Chief of AJO, Dr. Newell has run one of the most outstanding departments of ophthalmology in the United States at the University of Chicago. He has brilliantly kept up with clinical and laboratory research that has resulted in so large a number of publications that they required 16 full pages of AJO (the new full size edition) to list. Our readers are fully aware of the excellent contribution Dr. Newell has made to the teaching side of ophthalmology by his internationally respected textbook, *Ophthalmology, Principles, Concepts*. Despite his difficult position as Editor-in-Chief of a journal that every ophthalmic writer desires to publish his articles in but may not, Dr. Newell's fortune in friends is enviably obvious by the list of those who pay him tribute in the above *Festschrift*.

Dr. Newell was also awarded the 45th Leslie Dana Gold Medal Award of St. Louis Society for the Blind in June. It is noteworthy that this award was first presented 60 years ago, in 1925, to Edward Jackson, founder and first Editor-in-Chief of the present AJO. We heartily congratulate Dr. Newell on his astounding achievements and are proud of his association with THE PAKISTAN JOURNAL OF OPHTHALMOLOGY.

— Khalid J. Awan



Frederick C. Blodi, M.D.

Dr. Frederick C. Blodi, a Member of the Editorial and Advisory Board of THE PAKISTAN JOURNAL OF OPHTHALMOLOGY, has been selected a Guest of Honor for the 1985 Annual Meeting of the American Academy of Ophthalmology to be held on September 29 - October 3 in San Francisco, California. Byron H. Demorest, the Academy President, chose Dr. Blodi as a Guest of Honor in recognition of his contributions to the advancement of the art and science of ophthalmology. This is not the first time that the Academy has honored Dr. Blodi's leadership and achievements in the field of our specialty. He was also a recipient of the Senior Honor Award of the Academy last year. He was also the first president of the newer American Academy of Ophthalmology that was created when the older organization, the American Academy of Ophthalmology and Otolaryngology was reorganized into two separate ophthalmology and otolaryngology branches. Dr. Blodi was Chairman of the Department of Ophthalmology, University of Iowa and Chief Editor of the AMA ARCHIVES OF OPHTHALMOLOGY until 1984, when he became the Director of Medical Education of the King Khaled Eye Specialist Hospital in Riyadh, Saudi Arabia.

We congratulate Dr. Blodi for this great and well-deserved honor, and truly share Dr. Demorest's feelings that Dr. Blodi is a "brilliant student, a fine spokesman, an outstanding physician, a benevolent administrator, and an international leader in ophthalmology."

— Khalid J. Awan



Camera Clinicals

Edited by: Khalid J. Awan, M.D.

In this section of the Journal, photographic documentations of interesting and challenging observations will be presented to the readers. They should make their diagnoses from the given information and compare these with the **expositions** given on page 177 — Editor.

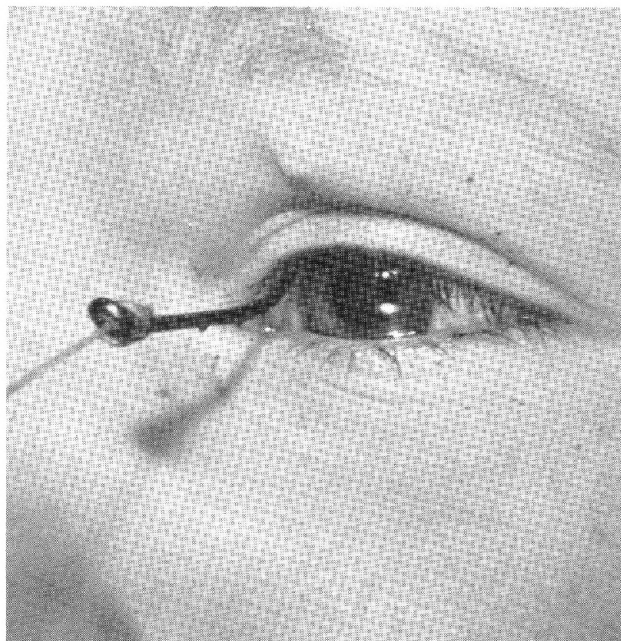


Figure 1

Figure 1. (Awan): A 5-year-old girl was rushed to the emergency room because a fishhook her father was casting flew into her left eye. Examination showed that the fishhook, still on its line, was lodged in the upper nasal area of the left orbit (Figure 1). The curved portion of the fishhook was completely embedded in the orbital tissues and the point was tenting the skin of the upper eyelid. The conjunctiva and the sclera in the upper nasal quadrant of the globe were lacerated, but most miraculously the fishhook had not perforated the eyeball. The fishhook was firmly caught in the orbital tissues, and appeared to have entangled the extraocular muscles. The depression and elevation of the globe were not possible, and the patient bitterly complained of pain when asked to move her eyes in these directions. The visual acuity was 20/30 in the right eye and 20/60 in the left with "E" chart. Biomicroscopy showed no reaction in the anterior chamber or any injury to its structures. Except for an area of edema in the upper temporal retina, the fundus appeared normal on ophthalmoscopic evaluation. **What is the best technique to remove the fishhook and what is the prognosis were the questions that needed consideration.**

Figure 2 (Awan): A 7-year-old boy had difficulty in seeing the blackboard. Eye examination uncovered a moderate degree of myopia. Although examination was normal in other respects, a patch of eyelashes was seen growing in an abnormal location about one centimeter

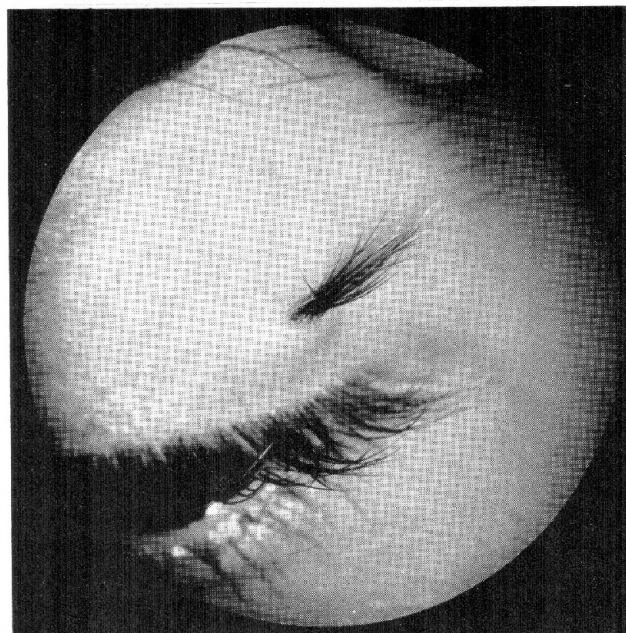


Figure 2

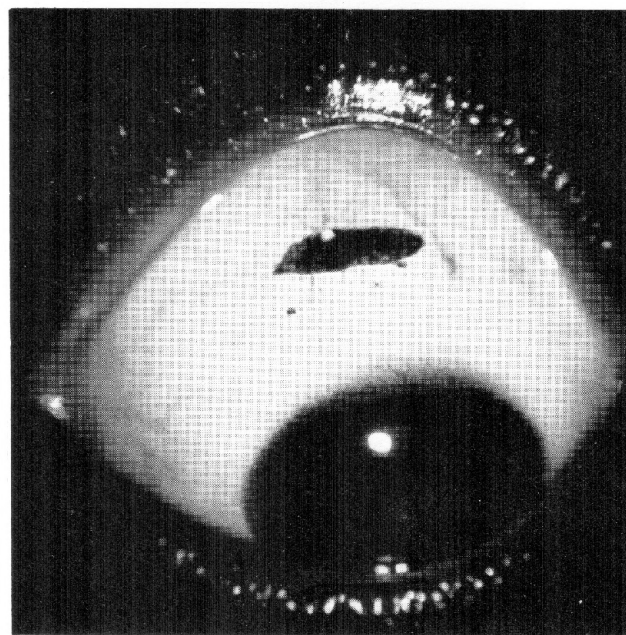


Figure 3

above the normal eyelash line of the left upper eyelid (Figure 2). The mother regarded it as a simple "birth mark" that needed no medical attention. She reported that the child occasionally felt irritation around the abnormal patch of eyelashes but refused its surgical excision.

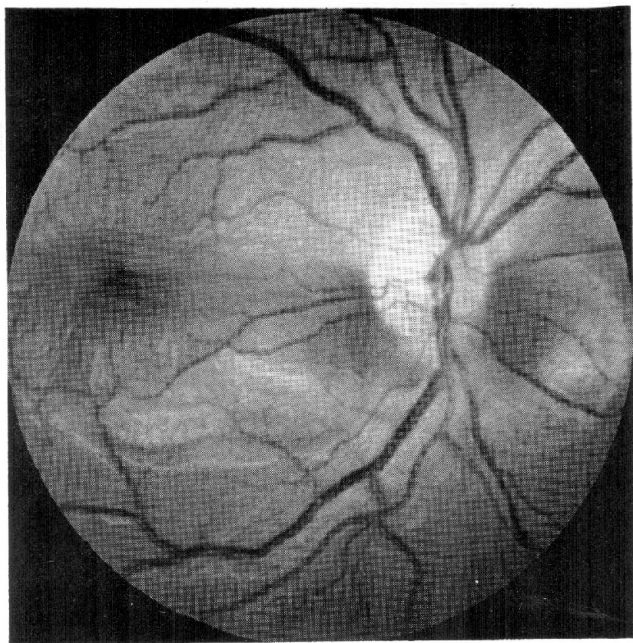


Figure 4

Figure 3 (Awan): A 22-year-old man complained of redness and pain in his left eye after being hit in it with a dirt ball. He sought medical care in a local emergency room because of redness of the eye and his belief that some of the dirt was still in the eye. The emergency room physician saw a dark foreign body in the conjunctiva at 12 o'clock about 8 mm behind the limbus. His repeated attempts at the removal of the foreign object failed. Despite the generous use of local anesthetic drops, the patient complained of sharp pain every time the emergency room physician tried to grasp the foreign body with a forceps. He referred the patient to an ophthalmologist's care.

After a thorough ophthalmological examination, the ophthalmologist decided against the removal of the foreign body, and the condition was most satisfactorily managed with local antibiotic drops alone.

Figures 4-6 (Awan): A 19-year-old man was hit in his right eye with a falling walnut while trying to shake the walnuts from a tree. The eye had turned red with watering and pain. The vision had also significantly decreased. On eye examination, it was found that his visual acuity was 20/200 in the right eye and 20/20 in the left. The vision had been equal in both eyes prior to the accident. On slit lamp examination, the eye had appreciable reaction in the anterior chamber with a small blood clot at 6 o'clock position. The ophthalmoscopic examination through dilated pupils showed that left fundus was normal, but there was a subretinal hemorrhage just around the inferior papillary pole in the right eye (Figure 4). As this did not fully explain the severe loss of sight, a fluorescein

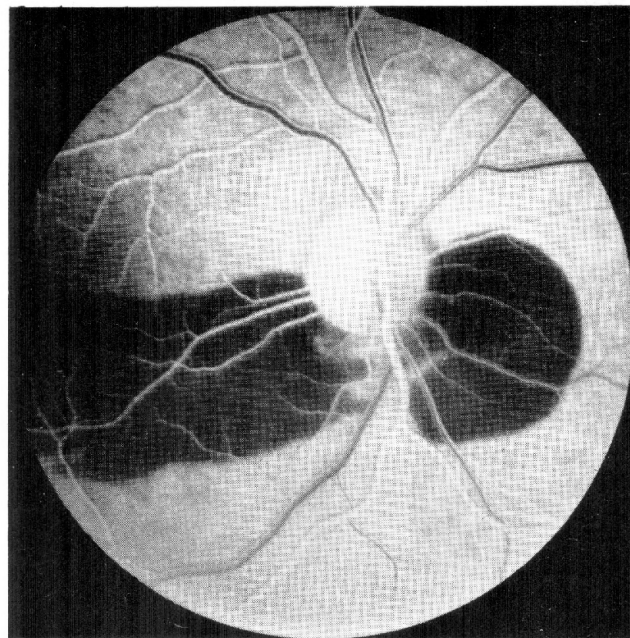


Figure 5

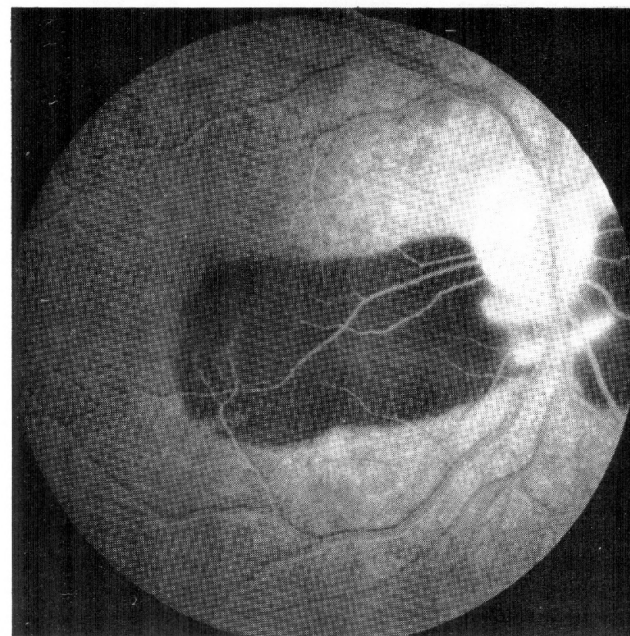


Figure 6

angiographic examination was performed (Figure 5). The patient was advised to enter the hospital on account of hyphema. He refused admission and was successfully managed by local drops of corticosteroids, atropine, and antibiotic. He also orally received 60 mg of prednisone with breakfast every day for seven days. He eventually recovered 20/20 vision in the injured right eye, but it was not "quite as clear" as the 20/20 vision in the uninjured left eye.



Proceedings of the 8th Congress of the Ophthalmological Society of Pakistan

Muhammad Humayun, F.R.C.S.



A.

Figure 1A. (Humayun): A large number of Pakistani ophthalmologists attended the 8th Congress of the Ophthalmological Society of Pakistan, held in Karachi. In the front row are (on lady's left) Dr. Norval Christii and Dr. Ronnie

On February 7-9, 1985, the Eighth Congress of the Ophthalmological Society of Pakistan was held in Karachi. Following a recitation from the Holy Quran, Professor Sardar Ali Sheikh, the President of the Society, formally inaugurated the proceedings. This was followed by the Annual Report from the Secretary, Professor Khalil Rana. Dr. J.H. Wania, the Chairman of the Karachi Organizing Committee, welcomed the participants and invited Professor Mahmud A Shah, President of Karachi Branch of the Society, to deliver his presidential address, which turned out to be a most enjoyable and lively speech of the evening. He began with a reference to the first issue of The Pakistan Journal of Ophthalmology as a shining milestone in the history of ophthalmology in Pakistan, and informed the audience that this event was so significant that he desired to get the other matters out of the way before he spoke about it in the last half of his speech. In the middle of his speech Prof. Shah unexpectedly turned to Dr. Wania, whose face betrayed concern that the ceremonies might go beyond the scheduled time, and delivered a most affectionate admonition: "Don't look at me accusingly. You told me I had 10 minutes, and I want you to know that I intend to use them all." The laughter that broke



B.

Holland, the recipients of the 1985 Ramzan Ali Syed Gold Medal. The author is second from left in the second row. **Figure 1B.** Prof. Raja Mumtaz (in Jinnah cap) Dr. Awan is third from right (taking notes).

out made the whole affair much pleasanter. In the last half of his speech, Prof. Shah highlighted the quality and the contents of the first issue of the Pakistan Journal of Ophthalmology, which he felt succeeded in meeting international scientific literary standards. He described the efforts of Dr. Khalid Awan as "superhuman," for he single-handedly launched The Journal and brought out the fine First Issue in a short time and under extremely haphazard conditions. "Dr. Awan's services as the first Editor of The Pakistan Journal of Ophthalmology are a deed of such pure patriotism that it has earned him a well deserved place in history, and we are deeply grateful to him and pray with sincere hearts that God Almighty rewards him well," he said. This statement received open approval and great applause from the audience. He praised the shrewdness and perception of Professor Raja Mumtaz in selecting Dr. Awan to shoulder the responsibilities of the first Editor. He urged all the Society members and Pakistani ophthalmologists to actively and sincerely support the Pakistan Journal of Ophthalmology and the efforts of Dr. Awan. He asked them to participate in the progress and the continuity of this fine instrument of literary aspects of Pakistan Ophthalmology by contributing scientific papers and

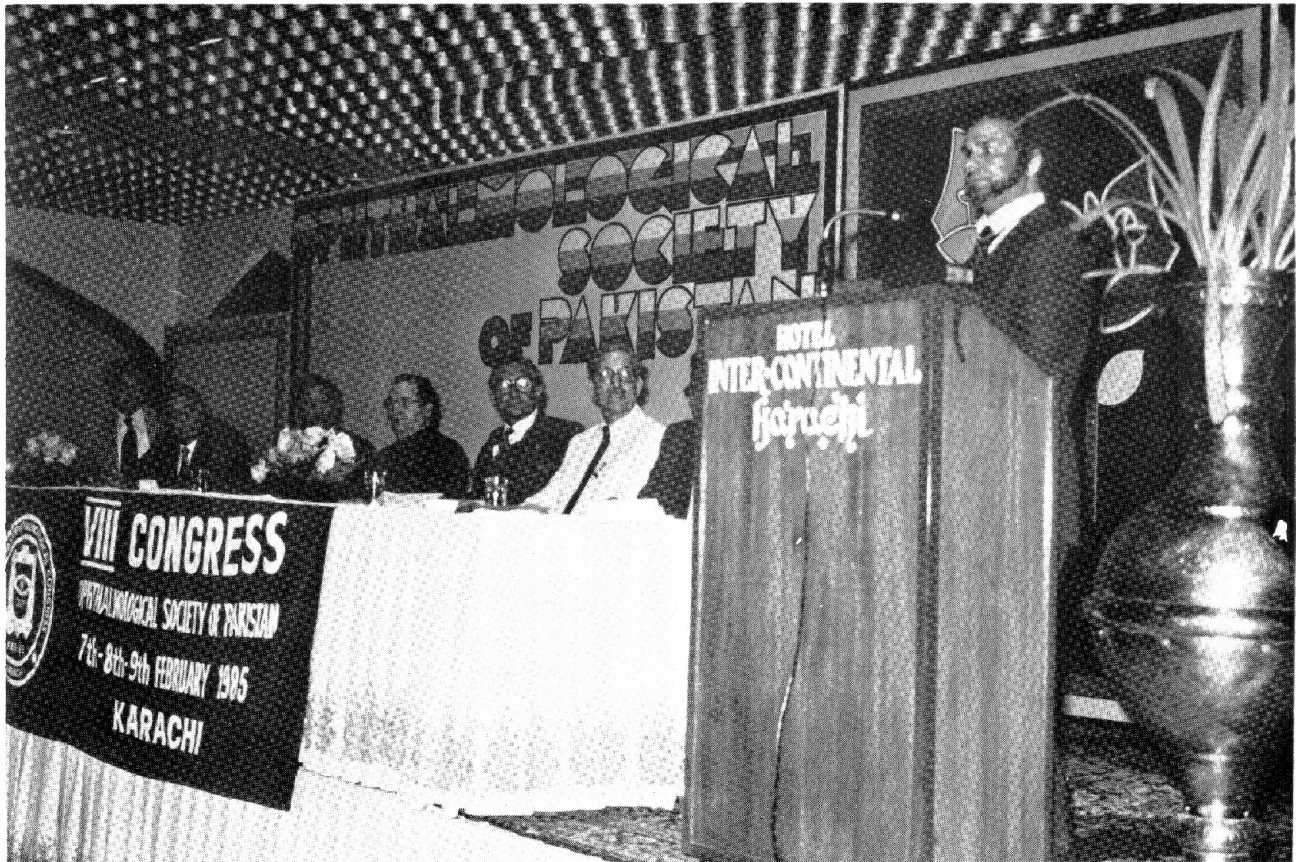


Figure 2. (Humayun): Khalid J. Awan M.D., the Editor, is introducing the First Issue of The Pakistan Journal of Ophthalmology. Seated from left to right are: Prof. Khalil Rana, The OSP Secretary, Comdr. Mohsin Paul, Director Health Services, Prof. Sardar A. Sheikh, The President of OSP, Dr. Basharat Jazbi, The former Health

Minister. Prof. Mahmud A. Shah, The President OSP, Karachi Branch, Dr. Jamshed H. Wania, Chief Organizer of the 8th Congress of OSP, Dr. Iqbal Waheed, Secretary of OSP Karachi Branch, (Hidden by the podium), and Dr. Awan (the speaker).

comments.

A large number of Pakistani Ophthalmologists attended the congress (Figure 1). The chief guest of the occasion was Dr. Basharat Jazbi, the former Federal Minister for Health, Special Education, and Social Services. He praised the efforts of the Society for the progress of ophthalmology in Pakistan and the launching of the Pakistan Journal of Ophthalmology. He pledged that the Federal Department of Health shall give a grant of Rs. 20,000 towards the publication of The Journal. Com. Mohsin Paul, Director General Health of Pakistan also attended the ceremonies, and expressed his great delight on seeing the first issue of The Journal.

Khalid J. Awan, M.D., Editor of The Journal, was invited to officially introduce the First Issue (Figure 2). In his remarks he outlined the major problems he faced in bringing the first issue out. One of these was lack of interest in Pakistani ophthalmologists to write scientific articles and their disheartening slowness in replying to his correspondence. He frankly told them that The Pakistan Journal of Ophthalmology was their journal, and they must contribute to it. He assured them that all accepted papers by them would be properly edited and given priority of publication over all other submissions. He informed them that since

The Journal had already come out, it was imperative that its regular quarterly publication continue under all circumstances. "If enough material was not submitted by the ophthalmologists inside Pakistan, I will be compelled to include my own writings and the writing of the non-Pakistanis to avoid a break in the continued publication of The Journal," Dr. Awan declared. He said that he was fully receptive to all responsible and constructive suggestions. He showed his eagerness to work with all whom Professor Raja Mumtaz wished to invite to join the Editorial Board. He informed that the selection of the members of the Editorial Board from Pakistan was left entirely to Professor Raja. However, he requested that all those who accept this responsibility should kindly comply with the formalities and be willing to give active participation. He thanked Professor Raja Mumtaz for asking him to accept the responsibilities of the first Editor of the Pakistan Journal of Ophthalmology. He also pledged that the Pakistani ophthalmologists abroad will donate every year in foreign exchange the matching sum to the total of what the Society had set aside (Rs. 25,000) and what Health Minister had pledged (Rs. 20,000) for the publication of the Pakistan Journal of Ophthalmology for as long as it was printed in the United States. He explained it to

the audience that to edit The Pakistan Journal of Ophthalmology and give it a quality comparable to the current international scientific literary standards was his patriotic duty, and that he wished to employ all his energies and literary experience to give Pakistani Ophthalmology something all could take pride in. This, he added, could not be accomplished without their interest and participation. He invited questions from the floor, but none were asked. At the conclusion of his address, Dr. Awan, made a formal presentation of the copies of the first issue to the Society President and others on the panel amidst the applause from the audience.

The 1985 Professor Ramzan Ali Syed Gold Medal was awarded to Drs. Norval Christi, and Ronnie Holland.

The scientific program commenced the next morning with a presentation by K. Sharif-ul-Hasan and Akhtar J. Khan on the **Management of Intraepithelial Epitheliomas and Squamous Cell Carcinomas of the Conjunctiva**. The topic of John Alpar of the United States was **Viscoelastic Surgery**. The practicality and the problems of **Outpatient Eye Surgery** were discussed by J.H. Wania and M. Mukhtar Ahmed. The results of treatment of **Cavernous Sinus Thrombosis** were presented by Agha Quizalbash. In this age of ophthalmic surgery when the techniques are becoming more complicated and dependent on the expensive and complex instrumentation, Dil Muhammad Mirza gave his ideas on **Simple Technique of IOL Operations**. The vexing postoperative problem of **Astigmatism in Cataract Surgery** was dealt with by Saleh Memon. The morning session was concluded by a panel discussion moderated by Dr. John Alpar.

In the afternoon session Akhtar J. Khan discussed a very impressive report on **Congenital Glaucoma** with many case reports from his own practice. It appears that like many other entities, congenital glaucoma is in need of a centralized program for its evaluation and management in Pakistan. Some changes were made in the schedule to accommodate speakers from abroad whose flight schedules conflicted with the printed program. It seems logical and practical that in the future, the speakers from abroad should be asked about their departure plans before their lectures are arranged in the program. However, Dr. Iqbal Waheed, Secretary of the Karachi Branch, is to be commended for being so congenial and efficient in rearranging the presentation schedule. The **Evolution of Angioid Streaks** with his original observations was discussed by Khalid J. Awan. He also presented his observations on **Diagnosis and Treatment of Neovascularization After Anterior Segment Surgery**. In recent years there have been rapid advances in the understanding and treatment of diabetic retinopathy. Muhammad Humayun and Khalid J. Awan presented up to date information on the pathogenesis and the clinical retinal changes in **Diabetes Mellitus-1985**. Dr. Awan also described two new clinical signs, "shiny

dots" and **isolated papillary hemorrhages**, in the ocular fundus that he felt might be helpful in the early diagnosis of diabetes mellitus. The histopathologic changes in **Exfoliation Syndrome** were the topic of M.A. Sheikh's paper: A useful variation in trabeculoplasty operation was presented by Norval Christi as an apparently new technique. Prof. Ramzan Mumtaz pointed out, however, that the surgical steps Dr. Christi presented had been used by Prof. Ramzan Ali Syed many years ago. The **Retinal Detachment** was tackled by Drs. M.H. Rizvi and M. Mukhtar Ahmed. Because of a lack of donor material, keratoplasty is a limited surgical procedure in Pakistan. It was encouraging that Khwaja Sharif-ul-Hasan, Zia Sheikh, and A. Hameed presented an **Analysis of 42 Cases of Penetrating Keratoplasty**. The application of **CAT Scan In Orbital Disease** was presented by Masood Afzal. Prof. J. Poujol's topic of discussion was **Ultrasound in Ophthalmic Diagnosis**. Dr. B Thyleforst and Dr. A. Homberg were other foreign participants in the 8th Congress. Dr. Thyleforst also was one of the first international recipients of a copy of the first issue of the Pakistan Journal of Ophthalmology. Drs. B. Underwood and R. Holland spoke on the **Problems During Ocular Surgery**.

As usual, the business meeting was quite lively. Immediately after the meeting was opened by the President and last annual meeting minutes approved, a dispute broke out between Dr. J.H. Wania and the Secretary, Prof. Khalil Rana. Dr. Wania had circulated some amendments to the By-Laws of the Society, and Prof. Rana objected that it had been done without his knowledge. Dr. Wania insisted that it was because Prof. Rana never conducted a timely correspondence. The argument was finally resolved by a resolution that Prof. Rana contact all local chapter secretaries and request them to distribute the proposed amendments to all the Society members for their consideration. Although Prof. Mumtaz Raja had asked members, including me, at the door if they had cleared their dues, Dr. Wania complained that some were attending the business meeting without having paid their annual dues, which is not allowed by the By-Laws of the Society. Many bursts of heated discussion broke out during the meeting, but eventually everything became clam, as usual. Dr. Awan mentioned to me that one of the reasons he did not want to miss the business meeting was to see if anyone had any questions about the Pakistan Journal of Ophthalmology, or any reservations about his responsibilities as the Editor. No such questions were raised by anyone. Since Dr. Awan had received an overwhelming universal approval of his work on the First Issue at the time of inaugural ceremony, I felt it unnecessary to prolong the business meeting by myself bringing up the subject of The Journal. The meeting adjourned with a resolution that the next Annual Meeting of the Society will be held in Quetta in late March or early April of 1986.



The Cryptophthalmos Syndrome

Ahmad M. Mansour, M.D.

ABSTRACT: A 4-month-old Iranian female infant had bilateral cryptophthalmos with severe systemic abnormalities that were incompatible with life. The systemic abnormalities included syndactyly, ventral hernia, enlargement of clitoris with other genital deformities, and nasal malformation. The patient died of respiratory complications. (Pak J Ophthalmol 1:169-171, 1985).

Cryptophthalmos (cryptophthalmus, cryptophthalmia, ablepharon, cryptophthalmos-syndactyly syndrome, or malformative syndrome with cryptophthalmos) is a congenital malformation in which the eyelid folds and fissures between the upper and the lower eyelids fail to form.¹⁻³ The skin of the forehead passes over the eyes to form a continuation with the skin of the cheek. Cryptophthalmos is "very rare"¹ and only 50 cases were reported in the hundred years that followed its first description by Zehender⁴ and Manz⁵ in 1872. The condition is usually partial and bilateral. In abortive forms only the missing upper eyelid is replaced by an epidermal fold that is attached to the superior cornea. The muscles of the eyelids are usually present but are deformed. The absence of lacrimal puncta and the lacrimal glands is not unusual. The globe is present behind the skin covering the orbit, but its anterior half is disorganized and adherent to the thin layer of skin covering it.

Cryptophthalmos is associated with a wide variety of systemic anomalies (Table). The purpose of this paper is to describe cryptophthalmos with extensive associated systemic changes in a 4-month-old Iranian girl who could not survive the severity of these abnormalities.

Case Report

This four-month old female baby was brought because of a productive cough, noisy breathing, and fever of two weeks duration that had failed to respond to adequate antibiotic and hydration therapy. The patient had skin covering part of the eyes (Figure 1). A large abdominal bulge has been present since birth (Figure 2). The baby was a product of full-term pregnancy and normal vaginal

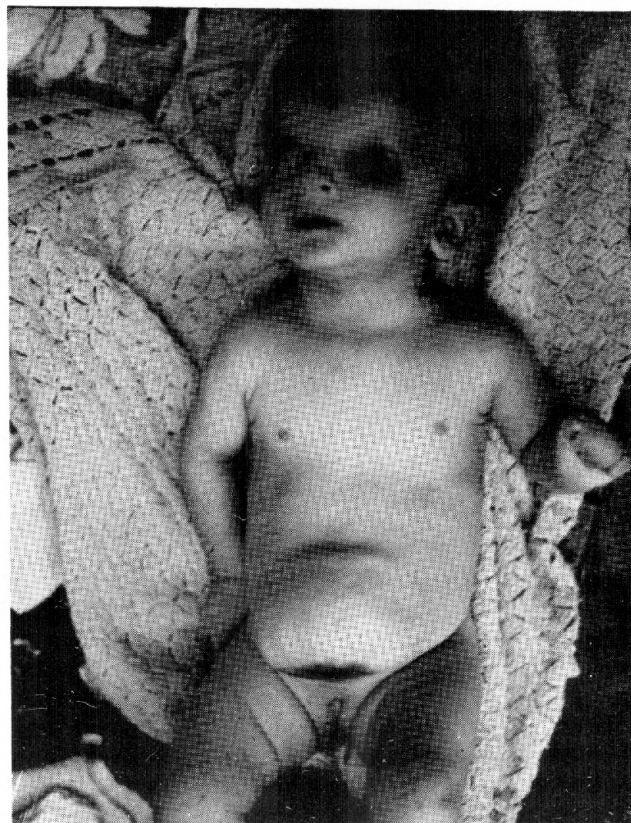


Figure 1. (Mansour): Bilateral Cryptophthalmos. Note ventral hernia, enlarged clitoris, and fused fingers of right hand.

delivery. There was no family history of similar anomalies. However, the parents were second cousins.

Physical examination revealed a height of 55 cms, a weight of 4 kgs, a head circumference of 37 cms, and 36.5 degrees Celsius body temperature. The patient had a weak cry, whitish nasal discharge, diffuse bronchial rhonchi, low set ears, and a very soft hypotonic abdomen with 10 cm by 10 cm bulge with a 3 cm by 3 cm pedicle at the umbilical site. There was syndactyly of both upper and lower

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Figure 2. (Mansour): Bilateral cryptophthalmos. Right eye is more involved than the left. Note the nasal deformity.



Figure 4. (Mansour): Close up of the enlarged clitoris.

extremities (Figure 4). The clitoris was enlarged and bound anteriorly with a chordae (Figure 5). Also, labia minora and majora were fused together. There was telecanthus, and skin folds were covering most of the anterior surface of the eye. Ectopic eyelash lines were noted in both eyes. The ocular surface not covered by skin tissue was keratinised. There was very minimal horizontal movement and a minimal blinking reflex was noted upon exposure to strong light.

The patient died four months later.

COMMENTS

Cryptophthalmos is fortunately a very rare congenital malformation. The eye findings are usually accompanied by several systemic abnormal changes (Table).¹⁻⁹ The life-span of the patient depends

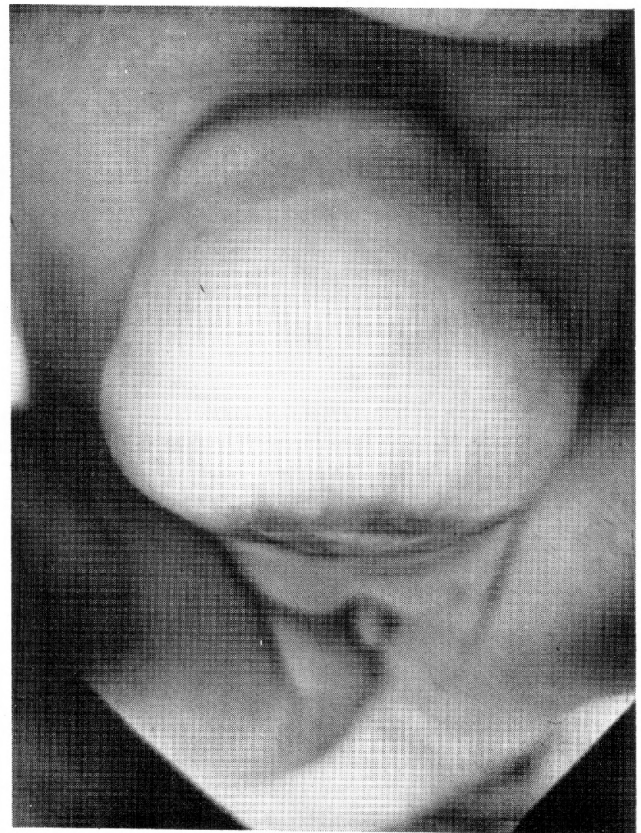


Figure 3. (Mansour): Close up of the ventral hernia.

Table 1
Systemic abnormalities associated with cryptophthalmos

1. Syndactyly
2. Hare-lip and cleft palate
3. Facial fissure
4. Malformed concha
5. Atresia of larynx
6. Meningo-encephalocele
7. Malformations of genitalia
8. Ventral hernia
9. Renal agenesis
10. Nasal malformations
11. Separation of pubic symphysis
12. Mental retardation
13. Cardiac anomalies
14. Speech articulation abnormalities
15. Brachycephaly

entirely on the extent and the severity of these systemic changes. Hence, the patients with only minimal systemic involvement have been known to survive to adulthood.¹ It is important that a thorough evaluation of infants with cryptophthalmos be carried out soon after birth to measure the severity of non-ocular changes.

Hereditary aspects of this disease have also been studied.^{1,9} The mode of inheritance is autosomal dominant in most instances, but dominant transmission has been considered.³ Hence, it is advisable to evaluate other siblings for hidden renal or other abnormalities, even if they do not have

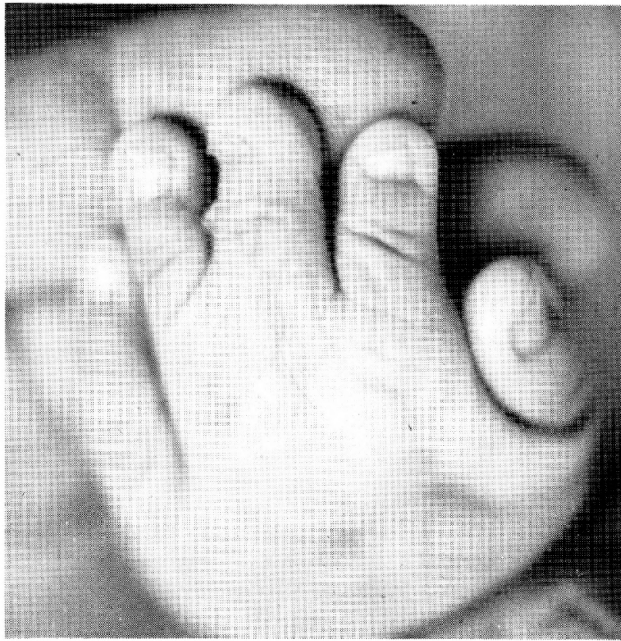


Figure 5. (Mansour): Syndactyly of fingers of the left hand.

cryptophthalmos.

Ocular management in cryptophthalmos is hopeless for any attempt at surgical opening of the skin in front of the globe leads directly into the inside of the eye. On the other hand, in incomplete or partial cases,

nothing is to be lost by an attempt at a surgical correction.

The pathogenesis of cryptophthalmos has been controversial. Amniotic band, ankyloblepharon by ankylosis, inflammatory changes, and other causes have been postulated for secondary cryptophthalmos. In their original reports Zehender⁴ and Manz⁵ considered a primary failure in lid formation as the cause for primary cryptophthalmos.

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Acknowledgement: Thanks are due to Dr. Khalid J. Awan for his valuable help in the preparation of this article.



Ophthalmic "Past-Pourri"

An Electrical Idea

Today:

"Some experts are working on computerized equipment that will allow ophthalmologists to measure the function of retina and optic nerve by using electrophysiological recordings without any direct cooperation from the patient."

Charles D. Phelps, M.D. - 1985
Iowa City, Iowa

A Hundred Years Ago:

"(We) think that from the varying electrical sensibility (we) can diagnosticate affections of the optic nerve when they cannot yet be recognized with the ophthalmoscope."

Dariez (and Abadie)
Diagnostic de l'amblyopie
par l'exploration
electrique du nerf optique. *Soc.
franc. d'opht.* 1884
(Jan.) (1-14-143)



Patient Evaluation and Medical Records in Ophthalmology

Khalid J. Awan, M.D.*

ABSTRACT: The prerequisites for a satisfactory ophthalmological evaluation and documentation include 1) a comprehensive knowledge of the normal ophthalmic anatomy and physiology; 2) an adequate skill and experience in the use of complex instruments employed in ocular examination; 3) detailed written and pencil sketch or photographic records of clinical findings; 4) ability to determine when a consultative evaluation of the patient and when and what laboratory studies are needed; and 5) a ready reference library in ophthalmologist's office. The author illustrates these points by medical records of a patient from his own practice, and gives a list of books for an office library. (Pak J Ophthalmol 1:172-176, 1985).

The recording of useful information and the proper evaluation of patients in ophthalmology is not much different than in any other medical specialty. However, in addition to the customary "history and physical" of other fields, several subsets of information gained by complex instrumentation and methods of examination are required even in a routine evaluation of an ophthalmic patient in one's office or an outpatient clinic. It is important for an ophthalmologist interested in scientific studies and literary aspects of ophthalmology to put down in writing every bit of information even if it superficially appears to be unrelated to the patient's initial complaints. Also, if during the evaluation of the presenting complaints, one finds or suspects an unrelated feature in the patient's eyes, it should be evaluated and recorded on the spot. An initial eye examination should always be comprehensive and include evaluation of every aspect of ocular function, whether a related complaint exists or not. It is not

possible to discuss every detail of ophthalmic evaluation and records in a single communication. However, I shall attempt to outline a series of steps for patient evaluation and record keeping in ophthalmic practice, and illustrate the system with an actual case history and reproductions of medical record forms from my own clinic (Figure 1-5).*

A reasonably thorough ophthalmological evaluation requires that the examining ophthalmologist be: 1) fully aware of the normal and the normal variations of ophthalmic anatomy and physiology; 2) skillful and experienced in the use of various complex instruments used in ophthalmology; 3) careful in not only writing down his impressions but also in making photographic or pencil sketch records of his findings where necessary; 4) in possession of a small but adequate reference library; and 5) able to determine when a consultative evaluation of the patient and when and what laboratory studies are required.

The first two objectives can only be achieved by practice. For example, frequent and repeated use of the direct and the indirect ophthalmoscopes will in time make the examiner fully familiar with the variations in the appearance of the normal ocular fundus. Similarly, the habitual use of slit lamp and gonioscope will not only lead to a comprehensive knowledge of the normal appearance of the structures of the anterior segment of the eye but also make the examiner more dexterous with the use of these very important tools of ocular examination. Once one is sure of normal appearances, it automatically becomes

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Awan • OPHTHALMIC EVALUATION RECORDS

(786)						Record No. 16843
OPHTHALMOLOGY RECORD						
NAME: <u>STANLEY</u>	<u>JAMES</u>	<u>EDWARD</u>	<u>49</u>	<u>M</u>	<u>W</u>	<u>M</u>
Last	First	Middle	Age	Sex	Race	M. Status
<u>Dec. 10, 1935</u>	<u>Coalminer</u>		<u>235-19-3764</u>			<u>Dr. Chaudhary</u>
Date of Birth	Profession		Social Security Number			FAMILY M.D.
<u>ADDRESS: 259-Virginia Avenue, Norton, VA. 24273</u>			<u>(703)</u>	<u>679-5391</u>	<u>Self</u>	
	Dr. SAEED of	Zip Code	Area Code	Telephone	Responsible Party	
<u>REFERRED BY: NCH-E. Room</u>			<u>INSURANCE: United Mine Workers' Assoc</u>		<u>EFF. DATE: September 1982</u>	<u>COMP.: N/A</u>
DESCRIBE YOUR COMPLAINT: "I have been having trouble with my right eye for the past 2-3 years. It on and off becomes red and watery, and I cannot see out of it. For past several months it has been painful. I would also like an examination for new eyeglasses."						
COMPLAINTS						
ORGANIC: (Redness = Swelling = Watering = Discharge = Abrasion = Foreign Body, metallic, wooden, glass etc. = Injury, Sharp or Blunt = Dryness etc.) <u>Redness, watering right eye</u> DURATION: <u>on and off-2 yrs.</u>						
VISUAL: (Blurriness at distance or reading = Spots in front of eyes = Defects in the field of vision = Flashes of lights = See Haloes around the lights = Light bothers the eyes etc.) <u>No sight in right eye</u> DURATION: <u>7-8 months</u>						
NEUROLOGIC: (Pain = Itching = Headaches, when and where? = Double Vision, in what direction? = Dizzy spells = Black outs, when and how long they last? = Cross Eyes, When and in which direction etc.) <u>Pain in the right eye and headaches</u> DURATION: <u>4-5 months</u>						
ANY PREVIOUS TREATMENT: <u>Two kinds of eyedrops-stopped using them</u> By: <u>An M.D.-JC Eye Clinic</u>						
PAST OPHTHALMOLOGIC HISTORY: (Glasses, for how long = Cross Eyes, duration and direction = Cataract, senile, congenital or traumatic? = Glaucoma, of sudden onset or chronic = Injury, how, when and what type? = Infections and Inflammations = Any Operations on eyes and their result = Retinal Detachment etc.) <u>WEARING GLASSES FOR THREE YEARS. INJURED RIGHT EYE SIX YEARS AGO BY RUNNING INTO TREE BRANCH-RECOVERED COMPLETELY.</u>						
FAMILY OPHTHALMOLOGIC HISTORY: (as above) <u>NONE</u>						
MEDICAL AND SURGICAL HISTORY: (High Blood Pressure = Diabetes Mellitus = Arthritis = Tuberculosis and other CHRONIC diseases = Any V D = Any Operations = Skin disorders = Anemia etc.) <u>ARTHRITIS</u>						
FAMILY MEDICAL AND SURGICAL HISTORY: (as above) <u>MOTHER DIED OF HEART ATTACK</u>						
MEDICATIONS: (Fluid pills = Heart pills = Nerve pills = Birth Control pills = Diet pills = Insulin = Antibiotics = Upset Stomach or Ulcer medicines = Muscle relaxants etc.) <u>NONE</u>						
EYE MEDICATIONS: (Drops, Ointments, Pills etc.) <u>WAS USING SOME KIND OF EYE DROPS GIVEN BY ANOTHER DOCTOR-STOPPED USING.</u>						
ALLERGIES: (Write in RED) <u>PENICILLIN</u>						
The undersigned has provided the above information and, hereby, permits Dr. Khalid J. Awan, M.D., assisted by the personnel of his choice to medically evaluate and treat my complaints. He may also disclose all the necessary information to my insurance company for billing purposes.						
I give my permission to Dr. K. Awan to take and use my photographs for medical records, teaching, or scientific publications.						
<u>James E. Stanley</u> (Signature of the PATIENT, the PARENT or the GUARDIAN)						
PHYSICAL EXAMINATION: (for patients to be admitted) General: <u>Appears healthy</u>						
Blood Pressure	<u>150/80</u>	Pulse	<u>76/m</u>	Respiration	<u>20/m</u>	Temperature
						<u>98.2°</u>
Head & Neck:	<u>Normal</u>					
Respiration & Chest:	<u>Clear to auscultation and percussion</u>					
Cardiovascular:	<u>Heart and pulse regular with sinus rhythm</u>					
Abdomen:	<u>Soft, no masses or tenderness</u>					
Neurological:	<u>no deficit</u>					
Extremities:	<u>normal (questionable arthritis changes)</u>					
Admitting Diagnosis:	<u>No Malignant Melanoma of Iris O.D (Pt. refused admission)</u>					
X-Rays & Laboratory:	<u>(Date 8-26-84) none ordered</u>					
AOC-1						

Figure 1. (Awan): Medical history and general physical examination sheet from the Awan Ophthalmology Clinic.

* The forms shown in Figures 1 and 2 are copyrighted material and to reproduce them a written permission from the author and the Pakistan Journal of Ophthalmology is necessary. - Editor

easy to detect abnormalities, even if the true nature of such abnormalities is not known to the examiner.

The detection of any abnormality should lead an ophthalmologist to the next two steps. First he should document the findings with written notes, simple hand drawn pencil sketches, and photographs. Then he should make a list of diagnoses that he thinks fit the findings he has recorded. Now he is ready to consult his library and see which one of his own diagnoses fits any of the descriptions in the books. Even if he is unable to locate the exact diagnosis, the text and the figures in the books and journals in his library will provide clues and directions for further search on the topic. Once the probable diagnosis is narrowed down to a few conditions, the perusal of literature will help the ophthalmologist in deciding what laboratory studies he must order and which specialists he should request to evaluate the patient to arrive at a final conclusion.

An Illustrative Record of Ophthalmic Evaluation

A 49-year-old man came to my clinic on August 26, 1984 with complaints of recurrent redness and poor vision in the right eye for over a period of about three years. He had previously tried several changes in eyeglasses without improvement. He reported that just before these complaints began, he injured his right eye with a tree branch, but fully recovered without any residual effect on his vision. His own and family medical histories were not relevant. He was not taking any medicines and his physical examination was clinically normal (Figure 1).

Eye examination (Figure 2) showed that visual acuity was HM (hand movements) in the right eye with or without correction, and 20/25 in the left eye without glasses, but improved to 20/20 with $-125 + 50 \times 180$. Externally, the eyes appeared normal except for slight distortion of the right pupil and increased pigmentation in the right iris at 2 o'clock position. The extraocular muscle functions were normal, but the right eye had a poor fixation. The intraocular pressure was 43 mm Hg in the right eye and 16 mm Hg in the left with applanation tonometry. The conjunctiva, the cornea, and the anterior chamber appeared normal other than the previously mentioned pupil and iris changes. The examination with a slit lamp showed that the iris lesion was elevated and lobular in structure and had a few visible blood vessels in it. The pupil had a small ectropion uveae at the area of pupillary peaking toward 2 o'clock. An external photograph of the iris lesion was taken (Figure 3). Gonioscopy showed that the anterior chamber angle in the right eye was GW (Grade Wide Open) with P IV (Grade IV Pigmentation) in 360° ; it was also wide open in the left eye, but with a P I superiorly and P II inferiorly. The iris lesion had invaded the angle and spread almost to two-thirds of the circumference (Figure 4). The lenses were clear except for a

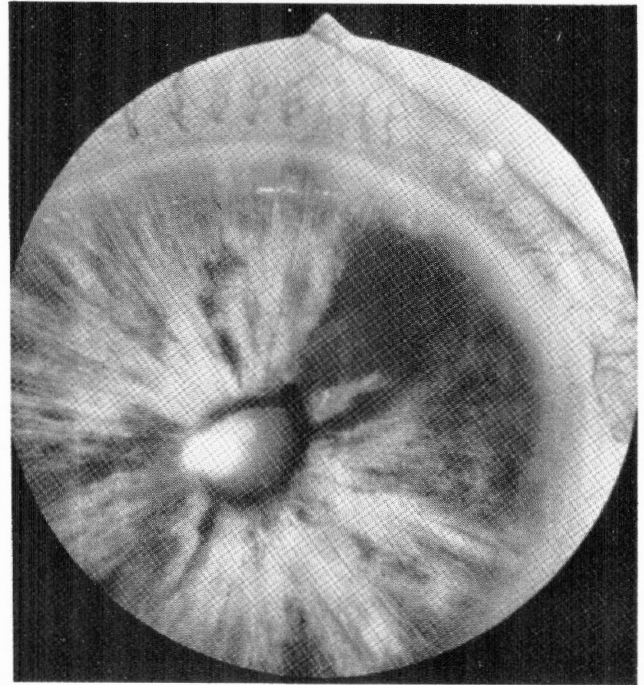


Figure 3. (Awan): External photograph of the right eye to show the iris lesion at 2 o'clock position and the peaking of the pupil toward it. Note ectropion uveae.

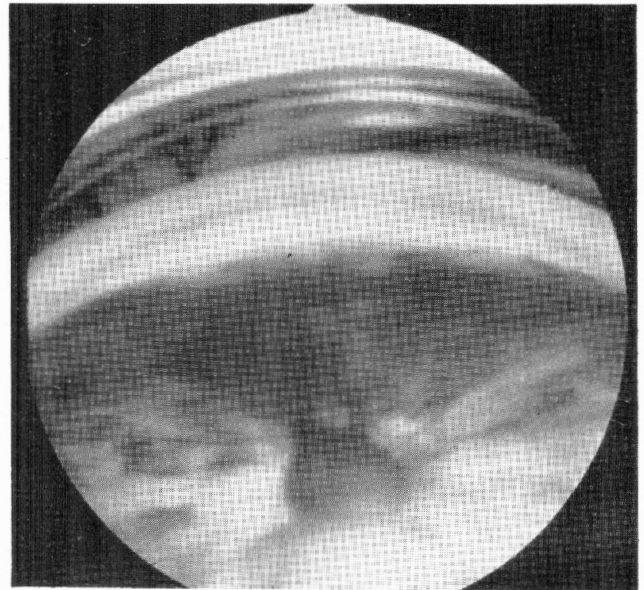


Figure 4. (Awan): Goniophotograph of the right eye showing angle invasion by the lobular iris tumor. Note also the heavy pigmentation of the angle.

peripheral localized cortical opacity at 2 o'clock position in the right eye. The cycloplegic refraction was $-350 + 200 \times 175$ in the right eye and $-150 + 50 \times 100$ in the left. The correction of this refractive error did not, however, improve the sight in the right eye. The examination, with both direct and indirect ophthalmoscope showed that the right optic disc had advanced glaucomatous cupping, (Figure 5) but the left disc was normal with 0.3 C/D (cup/disc ratio).



Figure 1

Ocular Trauma with a Retained Fishhook

Khalid J. Awan, M.D.

ABSTRACT: A fishhook lodged in the left orbit of a 5-year-old girl while her father was casting it. Most miraculously, the globe escaped perforation, and the patient totally recovered following surgical removal of the fishhook. The surgical technique is outlined. (Pak J Ophthalmol 1: 164, 177, 1985).

Since the globe was not perforated, ketamine hydrochloride anesthesia was used to remove the fishhook in the emergency room. The assistant firmly grasped the fishhook with strong forceps near the eyelid margin and close to the fishhook's eye to achieve immobility during the cutting of the shaft between the clamps. After the shaft was sliced off, a small incision parallel to the lid margin was made in the skin where the tip of the fishhook was felt. The exposed tip was grasped and the fishhook slowly pulled out while the assistant rotated the eye in the opposite direction with a forceps. Local and oral antibiotics were prescribed. Also, a dose of tetanus toxoid was administered. The patient had no residual problems after seven days.

Sporting eye injuries in fishermen are not common.¹⁻⁵

To see a child with ocular trauma with a fishhook still retained in the orbit is even more unusual. The eyes have also sustained damage from the breakage of eyeglasses from the impact of lead weights used in fishing.¹ In one rare instance, a fishing spear traversed the orbit without any residual defect.²

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Figure 2

Ectopic Cilia

Khalid J. Awan, M.D.

ABSTRACT: A 7-year-old boy had a patch of ectopic cilia growing about 10 mm behind the normal eyelash line of the left upper eyelid. It caused occasional irritation of the involved area. This rare anomaly of the eyelashes usually remains innocuous, but one report associated it with preseptal orbital cellulitis. Histologic reports have shown that ectopic cilia arise from the tarsal plate. (Pak J Ophthalmol 1: 164, 177, 1985).

Not much has been written about the ectopic cilia. Duke-Elder¹ regards it a "very rare" anomaly of the eyelashes and any published reports are scanty. However, what information is available points to an exclusive involvement of the upper eyelids. Some descriptions are confusing in that they do not clearly differentiate this condition from cilium inversum. Only about 6 cases of ectopic cilia have been previously described in English literature.²⁻⁴

The exact origin of ectopic cilia is not fully understood. Dalgleish² histologically studied two cases of ectopic cilia and found them to be arising from the anterior surface of the tarsus. He also noted apocrine sweat glands with hair follicles, giving a histologic confirmation that the anomalous hair were indeed eyelashes. This provides another reason to believe that there exists a relationship between the cilia and

meibomian glands. It is to be remembered that aberrant cilia may rarely arise as a secondary phenomenon from the meibomian glands of the chronically inflamed eyelids.⁵

It is interesting that Riffle⁴ reported a 6-year-old boy who had developed pretarsal orbital cellulitis in association with ectopic cilia that responded to local and systemic antibiotic therapy.

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Figure 3

Conjunctival Nevus Mimicking a Foreign Body

Khalid J. Awan, M.D.

Abstract: A 22-year-old Negro man had a homogeneously darkly pigmented and sharply demarcated nevus in the bulbar conjunctiva that was mistaken for a foreign body because of conjunctivitis and the patient's history of something going in the eye immediately before the eye became red. A careful slit lamp examination clarified the true nature of the problem. (Pak J Ophthalmol 1: 165, 178, 1985).

A careful evaluation of the "foreign body" under the slit lamp revealed it to be a conjunctival nevus. The lesion was linearly orientated, variable in thickness and of dark brown to black patchy pigmentation. These features most cleverly camouflaged it as a splinter of wood.

A pigmented lesion in a young man's conjunctiva that remains localized for several years most likely is a benign nevus.¹ The irregularities in the thickness and the pigmentation are usually a result of solid or cystic inclusions of epithelium. The nevi of the conjunctiva may be 1) intraepithelial, 2) subepithelial, 3) compound, 4) spindle-epithelioid cell, or 5) blue. The first and the third varieties prevail in the early years, and the second in the later years.² The nevi may increase in size and the pigmentation with age up to puberty or early adult life,

but then they start fading and may totally disappear by middle age. Hence, any new pigmented lesion that appears in the conjunctiva of an individual past middle age should be regarded with concern. Most conjunctival nevi, even those that show growth and inflammation, are benign.¹ However, Duke-Elder and Leigh³ advise that "every naevus should be looked upon as potentially dangerous."

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Figure 4-6

Early Diagnosis of Choroidal Rupture by Fluorescein Angiography

Khalid J. Awan, M.D.

Abstract: A 19-year-old man developed severe loss of sight in the left eye after being hit in it with a falling walnut. Fluorescein angiography helped in the diagnosis of a choroidal rupture and subpigment epithelial hemorrhage extending to the macula that were not visible on routine ophthalmoscopic examination. (Pak J Ophthalmol 1: 165, 178-179, 1985).

In the early arteriovenous phase of the angiography, a large hypofluorescent area could be seen extending from around the optic disc to the macula (Figure 5). The retinal vessels coursing across it showed that it was a subretinal hemorrhage. There was also a linear area of hyperfluorescence just below and concentric with the border of the optic disc (Figure 5). In the late phase of the angiogram, the hypofluorescent area remained so with sharp borders, indicating that the hemorrhage was under the pigment epithelium (Figure 6). (Hemorrhages between the pigment epithelium and the sensory retina have somewhat diffuse and fuzzy edges.) The linear hyperfluorescent area was much more sharply outlined, giving the diagnosis of a choroidal rupture that had become stained.

Indirect ruptures of the choroid from concussive injuries of the eye are common.¹ The initial appearance of these ruptures is usually obscured by the accompanying subretinal hemorrhage.¹⁻³ After the absorption of the hemorrhage the rupture is easily visible by an ophthalmoscope. The ultimate prognosis

depends on the distance of choroidal rupture from the macula. If the macula is not directly involved or the rupture is sufficiently far away from it, the prognosis for the recovery of vision is excellent. In the patient reported here the vision improved from the initial 20/200 (6/60) to 20/20 (6/6) after the absorption of the hemorrhage. Had the same rupture been near the macula, such improvement would not have occurred. Fortunately the retina over the choroidal rupture remains intact. However, retinal edema followed by retinal atrophy in the area of the rupture, macular holes, retinal detachment, or subretinal neovascularization may follow with serious loss of sight.¹⁻⁵

The choroidal ruptures are usually crescentic and concentric with the border of the optic disc but many shapes have been recorded.¹ In about 30% of the cases the ruptures are multiple.¹ They usually involve the retina temporal to the macula, but no location is entirely immune. Rarely, bilateral choroidal ruptures may develop from a single gunshot wound involving the mid-face.⁴

Fluorescein angiography is very helpful in the early diagnosis of choroidal ruptures and in determining their prognosis.⁴ It is also useful to do fluorescein angiography in patients with old choroidal ruptures who complain of sudden changes in their vision. In several recent studies, it has been found that some patients may develop subretinal neovascularization in the area of rupture, with subsequent hemorrhagic or serious detachment of the retina.²⁻⁵ The diagnostic signs of subretinal neovascularization include 1) episodes of blurred vision and metamorphopsia, 2) small area of bright-red subretinal hemorrhage, 3) local serous elevation of the retina, and 4) a greenish-grey pigmentation under the retina. Sometimes there may arise a need to differentiate between choroidal ruptures and angioid streaks of the ocular fundus.⁶ It is to be remembered that angioid streaks are more likely to develop subretinal neovascularization than are choroidal ruptures.^{4, 5}

Argon laser photocoagulation with dense whitening of the neovascular area, using 100- to 200-micron spot, 0.2 second time setting, and 550mW power, is considered the best approach in the management of subretinal neovascularization.⁴

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Ophthalmic "Past-Pourri"

Anatomy of the Eye - A Thousand Years Ago

"Eye is the organ of sight on the face, which enables man to see the external objects. The outer covering of the eye is a dense layer of tissue called **Sclera**. The front of this layer is transparent and is called **Cornea**. The sclera covers another layer which is called **Choroid**. The front part of this layer is mobile and is called **Iris**. Behind the iris is the **Lens**. Opposite the lens there is third layer of the eye which is called **Retina** to which is connected the **Optic Nerve**. There is a fluid between the lens and the cornea which is called **Aqueous Humor**. Similarly there is a fluid between the lens and retina called the **Vitreous Humor**."

Ibn ul Haytham — of Cairo (965-1030)
In his book KITAB AL MANAZIR

WOOPS IN "WITING"

The name of the author of Glaucoma in Punjab: Experience in a Teaching Hospital. (Pak J Ophthalmol 1:53, January, 1985 should read Riaz M. Mahju, F.R.C.S. instead of Riaz A. Mahju, F.R.C.S.



Ophthalmic Teaching and Training in Pakistan

In this issue a letter from Dr. Wahab focuses our attention on the lamentable state of ophthalmic teaching and training in Pakistan. This communication also makes evident the helplessness of those young Pakistani medical graduates who have a genuine desire and determination to become skillful ophthalmologists. It has added to their frustration that now even scientifically advanced countries like the United States are closing their doors on the foreign medical graduates who wish to come there for specialty training. It is imperative more now than ever that Pakistani ophthalmologists become not only thoroughly skillful in modern ophthalmic techniques but also create facilities to train interested young physicians. It is vital that Pakistanis sincerely strive to become self sufficient in specialized education and training in medical fields.

Teaching and learning are civilized and patriotic responsibilities. For Muslims they were made religious duties by Prophet Muhammad, Sallay-Alaho-Alaihe-Wassalum. I have studied the situation in Pakistan by interviewing students and members of teaching faculty at various medical colleges. It distresses me to say that these concerns have become things of the past in academic circles. Mutual regard and the relationships among students and teachers have so deteriorated that some have lost sight of their individual responsibilities toward nation and profession. Teaching and learning are responsibilities that demand undivided attention and utterly honest involvement from both the teacher and the taught. We urgently need to eliminate the present apathy and inertia; and get back to the business of meeting our obligations as teachers and trainees.

An ideal teacher is impeccable in integrity, interested in teaching, rich in scholarship and experience, limitless in patience, tireless in toiling, and master in the art of explaining. Granted there are not many individuals blessed with all of these qualities, but undoubtedly we can strive to come as close to the ideal as possible for each of us. An ideal ophthalmology trainee is compassionate, intelligent, hardworking, and knowledgeable in the basic sciences and the theory applicable to the eye. He is devoted to learning and has true respect for and gratitude to his teachers. He is blessed with dexterity and artistic temperament. Most of all, both the teacher and the pupil must have a natural yearning to help humanity without greed or material gain.

Unfortunately, the facilities for teaching modern ophthalmology are almost non-existent throughout Pakistan. Even the most respected and honored academic centers are not sufficiently equipped for this purpose. Whatever modern equipment is available, is rusting away waiting for adequately trained staff to use it. It is interesting, however, that some private practitioners are taking advantage of the liberal policies of the current government on the import of the medical equipment and are establishing private eye hospitals that boast not only modern equipment, but also staff who can efficiently use them. Some of these privately owned hospitals are also taking young medical graduates to train them in modern ophthalmic techniques. This situation might prove to be the very stimulus needed for the teaching institutions to improve their facilities and teaching patterns before they lose prestige and privilege. No doubt the availability of proper facilities is important for training young physicians interested in ophthalmology, but when all is said and done, it all comes down to the quality of the men, those who teach and those who are being taught.

Well planned study of prevalent teaching methods and possible improvements is required to design programs that will meet our needs in ophthalmic training at undergraduate, graduate, and postgraduate levels. Such studies can not be conducted overnight and will take a long time and large manpower. For the immediate needs of our people and the young ophthalmologists like Dr. Wahab, combined and sincere efforts by government health officials and the teaching staffs of medical institutions in Pakistan are needed to establish well-planned didactic programs that invite Pakistani ophthalmologists abroad and foreign eye specialists to give extended practical courses. The government authorities should provide a few well equipped facilities and the members of the staff of the local medical institutions should cover the theoretical curriculum with the participants before these practical courses. The success of such programs will depend, of course, on the sincere and patriotic zeal of all the Pakistanis. I truly don't believe that occasional lectures on esoteric topics by visitors are of any wide usefulness to Pakistani audiences. Even in a scientifically advanced country like the United States it takes one year of internship and at least three years of full time residency training to be allowed to practice

ophthalmology. Our ultimate goal should be to establish training programs on the similar pattern with necessary alterations to suit our circumstances.

— Khalid J. Awan

Remarks and Replies

With this issue of The Journal, a new section, "Remarks and Replies," begins. It is intended to bring to our readers what is customarily published in "Letter to the Editor" of other journals. Some reputable ophthalmic journals, The American Journal of Ophthalmology for one, distinguish original scientific papers that are concise and to the point from the opinions expressed by readers on what has already been published in their pages. They publish the former in the section called "Letter to The Journal" and the latter in the section on "Correspondence." In the Pakistan Journal of Ophthalmology, the Editors have decided to publish communications falling into either of the above categories in the new section, "Remarks and Replies." For this section the readers may submit for consideration any interesting clinical

observations, new useful and practical ideas, experimental studies that are either preliminary or easily presentable in concise form, descriptions of new instruments or techniques, and opinions about the material that has already been published in the Journal. The accepted reports that will fit on one page of The Journal still will be published in the "Concise Communications" section.

— Khalid J. Awan

Urdu Abstracting of English Papers

With this issue THE JOURNAL is beginning the publication of Urdu abstracts of all primary articles that are in English. I have abstracted and written the following Urdu summaries of major articles in this issue. I cannot boast of a perfect command of Urdu, and hence must request readers more proficient in Urdu to point out the deficiencies. In the future, the Urdu abstracts will accompany the related individual articles.

— Khalid J. Awan

خلاصہ جات

جھا جھکے کے بالوں سے التهاب الملتحمہ المعقد مصنفین: خالد ج. اعوان اور ج. ریمرو ولٹر۔

التهاب الملتحمہ المعقد آنکھ کی جھلی کی مسلسل یا مکرر الوقوع سوزش ہے جو کہ جھا جھکے کے بالوں سے ہوتی ہے۔ کبھی کبھار بلودوں کے مبینہ کانچے، فصونی دھاگوں کے ٹکڑے، یا اور ذرات بھی اس کی وجہ بن سکتے ہیں۔ طبی حاشیہ پر پونے کی جھلی میں ایک ماسکی سرجی، آنکھ کی اشکباری، اور قرینہ میں جتنی دار اصطباغ پائے جاتے ہیں۔ مگر جھا جھکے کے بال کی شناخت کے لئے شفاف دارقندیل سے خوردبینی حاشیہ انتہائی ضروری ہے۔ پیتھالوجی حاشیہ پر خارجی ذرات کے ارد گرد آنکھ کی جھلی کی ظہاری سطح میں خراج اور سخت الظہاری سطح میں ورم جینیسی پائے جاتے ہیں۔ مصنفین نے اس مضمون میں شولہ مرلیفون کا تذکرہ کیا ہے اور ان کا خیال ہے کہ جھا جھکے کے بالوں سے التهاب الملتحمہ المعقد موجود گمان سے کہیں زیادہ عام ہے۔ (مجلہ طب لیون پاکستان، ۱۵، ۱۶۰ تا ۱۶۱) دانت کے قیورے کی ایک مشترک حکم الوقوع قضاعی قرینی التهاب المطانہ۔ مصنفین: حامد م. ملک اور محمد سعید۔ ایک چھٹا لیش سالم عورت کی بائیں آنکھ میں حکم الوقوع قضاعی قرینی التهاب المطانہ پایا گیا۔ یہ مرض دانت کے چھوڑے کب قہ مشترک تھا اور دونوں حادثہ اکٹھا پڑتا تھا۔ محو کارٹیکو سٹیرائڈ کے قندروں سے التهاب المطانہ

مدیم پڑ جاتا تھا ممکن صحت یابی آئندہ دانت کے لفافے پر ہوئی۔ (مجلہ طب لیون پاکستان، ۱۶۱ تا ۱۶۲)

تناذر اختفاء العینین۔ مصنف: احمد منصور۔ ایک چار ماہ کی ایرانی بچی میں دو طرفہ اختفاء العینین پایا گیا۔ اس کیس تھا اور بھی شدید خلاصہ محول تغیرات نظام جستانی میں موجود تھے۔ ان میں چسپاں انفکاب نفق بطنی، وسعت بنظر اور دوسرے تغیرات اعصابی متنازل اور عیوب انفی شامل ہیں۔ بچی چار ماہ کے بعد چھپوڑوں کی مسلسل تکلیف سے جان بحق ہو گئی۔ (مجلہ طب لیون پاکستان، ۱۶۱ تا ۱۶۲)

طب لیون میں مریض کا حاشیہ اور اندراج طبی۔ مصنف: خالد ج. اعوان۔ مصنف نے آنکھ کے مریض کے قسلی بخش معائنہ اور اس کے اندراج کے اہم لوازمات بیان کئے ہیں۔ ۱، آنکھ کے علم الاعضاء اور علم وظائف الاعضاء کا مکمل علم، ۲، پیچیدہ آلات کے استعمال میں حوزوں مہارت، ۳، مشاہدات کما محفل نوشتہ، فولوگرمانہ، اور خاکائی اندراج، ۴، دورے قاسمین سے رائے حاصل کرنا اور دارالتجربہ سے کیمیای اختانات کے معاملہ میں قوت فیصلہ اور ۵، انت ذاتی مناسب لہجہ برسی ضروری ہیں۔ مصنف ذاتی مشائخ سے قریب بحث نقاط کی وضاحت کرتا ہے اور حوزوں کتابوں کی ایک فہرست مہیا کرتا ہے۔ (مجلہ طب لیون پاکستان، ۱۶۱ تا ۱۶۲)



Angioid Streaks of the Ocular Fundus and Retinal Detachment

Assalam-o-alaikoom! I congratulate you on your successful efforts to bring out the first issue of the Pakistan Journal of Ophthalmology. I am sure with your ability and determination it will soon become one of the popular documents in ophthalmic literature.

Although the whole first issue was impressive in content, style, and reproduction, I particularly enjoyed the lead article "Angioid Streaks of the Ocular Fundus: The First Professor Muhammad Shafi Memorial Lecture."¹ In addition to the original description of association of angioid streaks with ocular melanocytosis and Gilbert's disease, the article included a very fascinating photographic documentation of emergence of angioid streaks in the eye of a 46-year-old man. The review of the subject of angioid streaks and their differential diagnosis will greatly benefit all ophthalmologists.

Over a decade ago, I reported the occurrence of rhegmatogenous retinal detachment in a 20-year-old Indian man with Groenblad-Strandberg syndrome.² This case was also very interesting in that the angioid streaks were not visible by an ophthalmoscopic examination, but were clearly delineated on fluorescein angiography. There were present peculiar pale-colored intraretinal bands of tissue that radiated outward from the optic disc. These bands were non-fluorescent in the early phase, but became fluorescent in the late phase of angiography.

We felt that the seepage of exudate through the breaks in Bruch's membrane caused the reaction and appearance of these fibrous bands. Encircling procedures successfully reattached the retina in both eyes, but this unfortunately did not improve the patient's visual acuity.

My associates and I felt that the generalized degeneration of mesodermal tissue involving the media and the elastic lamina of the blood vessels seen in Groenblad-Strandberg syndrome could have led to retinal degeneration that resulted in retinal detachment in our patient.

Prof. Wasif M. Kadri, FRCS
Allama Iqbal Medical College
Lahore, Pakistan

References

1. Awan, KJ: Angioid streaks of the ocular fundus. The First Professor Muhammad Shafi Memorial Lecture. Pak J Ophthalmol 1:1-20, 1985
2. Kadri, W, Rosen, E and Harcourt, B: Intraretinal changes in the Groenblad-Strandberg syndrome. Brit J Ophthalmol 57:588, 1973

Reply

Wa-alaikoom-ussalam! I am most grateful to Professor Kadri for his kind comments about my

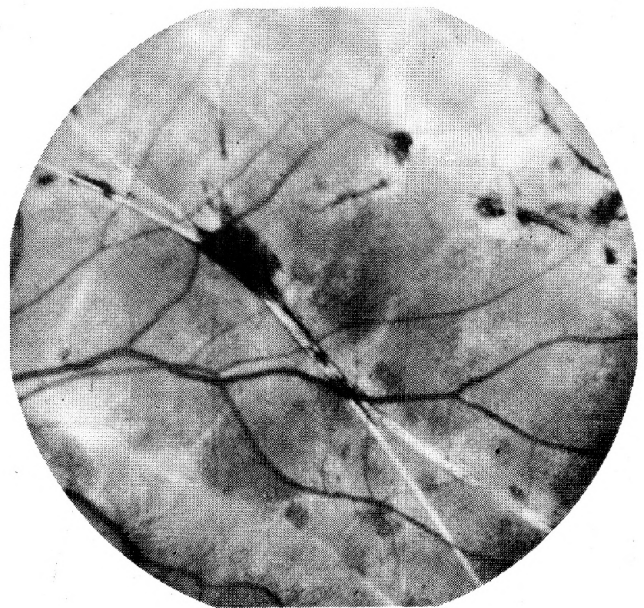


Figure 1. (Awan): Subretinal bands closely resembling those in the case of Kadri et al are clearly visible in the fundus. The presence of these bands is a sure sign of previous retinal detachment with spontaneous reattachment. (From Sternberg, P, and Machemer R: Subretinal proliferation. Amer J Ophthalmol 98:456-462, 1984. With permission of the author and the Ophthalmic Publishing Company).

efforts in bringing out the first issue of the Pakistan Journal of Ophthalmology and "my ability" to give it a successful future. However, I have given a start to The Journal hoping that the Pakistanis will pool together their abilities in a patriotic and positive way to secure a brilliant future for this instrument of national ophthalmology.

Professor Kadri and his colleagues' report of a case of Groenblad-Strandberg syndrome with bilateral rhegmatogenous retinal detachment is most interesting.¹ I am aware of retinal detachment in Ehlers-Danlos syndrome,² but missed their report on its occurrence in pseudoxanthoma elasticum. They say that the generalized degeneration of mesodermal tissue involving the media and the elastic lamina of the blood vessels seen in pseudoxanthoma elasticum led to retinal degeneration that resulted in retinal detachment in their patient. If this is so, we should see retinal detachment with much greater frequency in pseudoxanthoma elasticum. I do not agree with the explanation of the cause of retinal detachment in this patient as given by Professor Kadri and his colleagues. Their case is an exception and not the rule. It seems more likely that the contraction of the subretinal bands contributed to a (recurrent?) retinal detachment in their patient. They explain that the seepage of exudate through the breaks in Bruch's

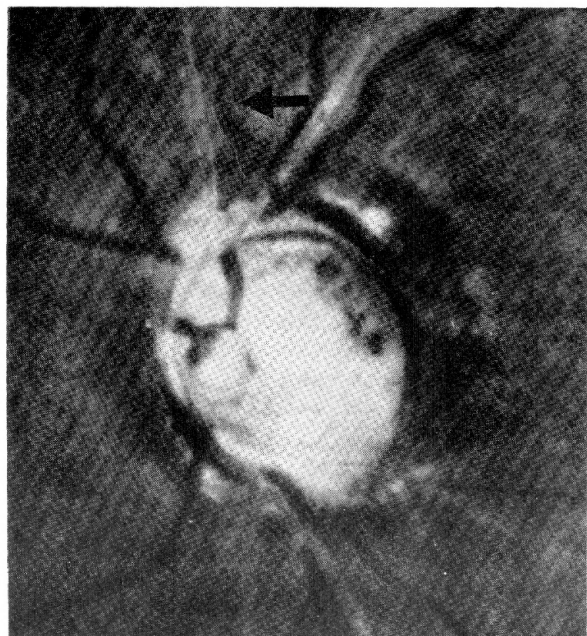


Figure 2. (Awan): Angioid streaks (arrow) in an eye with ocular melanocytosis. The patient was primarily reported by the authors for glaucoma and no mention of angioid streaks was made. The presence of angioid streaks was confirmed by the author in a personal communication. (From Foulks, GN, and Shields, MB: Glaucoma in oculodermal melanocytosis. *Ann Ophthalmol* 9:1299, 1977. With permission of author and Annals.)

membrane is responsible for the intraretinal bands in their patient. However, recent studies have shown that these bands develop from the retinal pigment epithelial and the glial cells that migrate into the subretinal space and change into fibroblasts that proliferate to form membranes and bands. The bands formed by the retinal pigment epithelial cells are usually pigmented, but those formed by the glial cells may remain non-pigmented. An occurrence of retinal detachment is a prerequisite for the development of these membranes and bands.³ In fact, their presence in the attached retina is a sure indication that there has been a detachment that either settled spontaneously or was surgically treated. Such cases of intraretinal bands following a spontaneous reattachment of a detached retina have been recently described (Figure 1).³ The patient of Kadri et al had 20/80 (6/24) vision in the right eye and 20/120 (6/36) in the left, indicating a good possibility of a previous spontaneously resolved retinal detachment.

Their patient, in whom the angioid streaks were not visible on examination with an ophthalmoscope, reconfirms the importance of fluorescein angiography in patients with suspected angioid streaks.

Since my first description of the angioid streaks in eyes with ocular melanocytosis, I have seen a published photograph of a patient with ocular melanocytosis who was primarily reported by the authors for having ipsilateral glaucoma. The authors made no mention of the angioid streaks that were clearly visible in the figure that accompanied their article (Figure 2). Finally, I have recently seen

another case of Gilbert's disease with associated angioid streaks.

Khalid J. Awan, M.D.
Norton, Virginia

References

1. Kadri, W, Rosen, E, and Harcourt, B: Intraretinal changes in the Groenblad-Strandberg syndrome. *Brit J Ophthalmol* 57:588, 1973.
2. Pemberton, JW, Freeman, HM, and Schepens, CL: Familial retinal detachment and Ehlers - Danlos syndrome. *Arch Ophthalmol* 76:817, 1966.
3. Sternberg, GP and Machemer, R: Subretinal proliferation. *Amer J Ophthalmol* 98:456, 1984.
4. Foulks, GN, and Shields, MB: Glaucoma in oculodermal melanocytosis. *Ann Ophthalmol* 9:1299, 1977.

Ophthalmological Society Of Pakistan: A History

Assalam-o-alaikoom! I just got the latest issue of the Pakistan Journal of Ophthalmology. It was a pleasure to go through its pages. I particularly enjoyed the excellent article on the history of the Ophthalmological Society of Pakistan by Professor Raja Mumtaz Quli Khan.¹ May I congratulate Professor Raja for covering all the important events in the life of our association in such a clear and cogent manner. I am grateful to him for his generous, and rather exaggerated, reference to me in the paper. May God Almighty bless the Editorial Board. The Journal under their guidance seems to be flourishing.

Professor Mahmud A. Shah
Karachi, Pakistan

Reference

1. Khan, RMQ: Ophthalmological Society of Pakistan: A history. *Pak J Ophthalmology* 1:66-70, 1985

Reply

Wa-alaikoom-usalam! I am very pleased that Professor M.A. Shah, one of the most learned and highly regarded leaders of Pakistan Ophthalmology, approves of my rendition of the history of the Ophthalmological Society of Pakistan. He has closely watched the Society since its birth and has greatly contributed to its progress. His approval means that what I have written in my article is not only authentic, it is important as well. I am eagerly looking forward to seeing in print some of Professor Shah's own thoughts about the progress of ophthalmology in Pakistan in one of the future issues of the Journal.

Professor Raja Mumtaz
Lahore, Pakistan

A Scholar's View of The Journal

Assalam-o-alaikoom! I have seen the latest issue of Pakistan Journal of Ophthalmology (Volume 1 No. 2 - January, '85) and went through the history of

Ophthalmological Society of Pakistan as given by Prof. Raja Mumtaz.

This Journal is indeed befitting to the high objectives, role and expectations of The Ophthalmological Society of Pakistan. It is another very important milestone in the life of the Society. The Journal is obviously good because of the high quality of paper and printing in the U.S.A. but I feel that the main reason it achieves International standards is the high quality of original articles contributed by the ophthalmologists working in Pakistan and the U.S.A. Each article has well worded abstracts, clear substance and adequate references without any errors.

Having some experience in such a production I can appreciate the hard work which Dr. Khalid J. Awan had to undergo. In my opinion this Journal can be compared with any international journal of ophthalmology.

I pray that, with the passage of time, the standard will not only be maintained but further improved. I congratulate the Senior Editor, Prof. Raja Mumtaz, the Editor, Dr. Khalid J. Awan and Consultant Editor, Dr. Frank W. Newell.

Lt. Gen. M.A.Z. Mohyidin, FRCP, FCPS
Dean, Postgraduate Medical Institute
Professor and Head, Department
of Medicine
Lahore, Pakistan

Reply

Wa-alaikoom-ussalam! Dean Professor Mohyidin's evaluation that the Pakistan Journal of Ophthalmology "can be compared with any international journal of ophthalmology" is noteworthy. Coming from a man of his scholarship and stature in Pakistan, it is a real tribute. The Pakistan Journal of Ophthalmology is another milestone that we consider to be our contribution to the progress of Medicine of Pakistan. I find it most gratifying that he approves of our efforts. His specific comments about the standard and the style of The Journal make his critique much more than a routine compliment. I assure him that I shall try, for as long as I have the support and the guidance of people like him and the freedom to do so, to not only maintain but also to steadily improve the standard and the quality of The Journal. However, I remain convinced that an active and positive participation by others is most important to achieve this goal.

Dean Mohyidin has specifically pointed to my contribution and hard labor in the launching of the Pakistan Journal of Ophthalmology. Only a man who has lived through a similar experience could have realized it so distinctly. I am grateful to him. It is encouragements like this that are the source of my drive and energy. He ought to know it; he has led men.

Khalid J. Awan, M.D.
Norton, Virginia

Camera Clinicals

Assalam-o-alaikoom! I am writing this letter to convey my feelings and some feedback on the section of the journal I liked the most and that is the section on "Camera Clinicals." I find it very conducive to imparting clinical knowledge, especially to ophthalmology residents in training. It is also a very important tool in self-education for busy ophthalmologists in private practice. The topics chosen were appropriately selected and the quality of the pictures was exquisitely sharp. It would have been even more appealing and eye-catching had the photographs been in color. I liked the idea of a concise discussion and providing references after each "Camera Clinicals Exposition" as this becomes a ready source of information for busy practitioners.

I found Figure 3 of "Camera Clinicals" and its Exposition in the January 1985 issue of The Journal¹ to be very interesting and would like to make a few important points that should be kept in mind when dealing with corneal and especially anterior chamber angle foreign bodies. In most cases such patients seek medical attention right away and the problem is taken care of. However, minute foreign bodies in the anterior chamber may escape the patient's attention and may remain in the lower part of the anterior chamber for some time without creating any obvious symptoms. These occult foreign bodies in the inferior angle should be kept in mind in those patients who complain of episodic irritation and redness, especially in the lower third of the eyeball. Such eyes may show microcystic edema of the inferior cornea when examined under the slit lamp, and gonioscopy will confirm the diagnosis.

In instances of multiple foreign bodies it is very important that the examiner does not forget to evaluate the other eye. The patient may sometimes mislead the doctor by placing an emphasis on the symptoms in the eye with greater discomfort and forgetting about the other eye. The examining doctor should make sure that no such foreign bodies go undetected. Failure to do so may not only become a source of embarrassment for the doctor but may even lead to medico-legal action.

I am also curious about the nature of the white patch at 6 o'clock in figures 4 & 5 of "Camera Clinical" in the same issue of The Journal. Was this an unrelated finding or merely an absorbing exudate? It resembles a patch of medullated nerve fibers.

I cannot end this letter without expressing my feelings after reading the first two issues of The Pakistan Journal of Ophthalmology. I am very thrilled to see this splendid journal. I must admire and congratulate you for this excellent work. This illustrates a monumental effort put forth by yourself and I hope that you will keep generating enough energy to keep publishing this beautiful journal. It is undoubtedly the service of the highest order any patriotic Pakistani could aspire to render our nation

and profession. I congratulate you most sincerely.

M. Humayun, M.D.
Dartmouth, Nova Scotia

References

1. Awan, KJ: Old iron foreign body in iris mimicking a tumor. Pak J Ophthalmol 1:64 and 98, 1985
2. Awan, KJ: Pulsatile macroaneurysm of the superior temporal artery of the retina. Pak J Ophthalmol 1:65 and 98-99, 1985

Reply

Wa-alaikoom-ussalam! Dr Humayun's views about the section on "Camera Clinicals" are similar to the ones that prompted me to introduce it. I am delighted that he finds the quality of the photographs used in this section "exquisite."

I myself took the photographs of all the cases so far published in this section of The Journal. I have always believed that only the physician himself can capture all the essential clinical features in their completeness in medical photography. It is a process that is tedious and frequently wears one down, but results usually are very rewarding.

Unless others begin to contribute to "Camera Clinicals," I am afraid The Journal cannot implement the suggestion of Dr. Humayun for more than four cases per issue. I invite and urge Dr. Humayun and other ophthalmologists to send short reports for consideration for "Camera Clinicals". It is important for the contributors to know that all entries will be subject to a review before publication, and no submission that has been previously published, or is being simultaneously considered by another publication will be accepted.

Dr. Humayun is indeed a keen observer. The white patch in the Figures 4 and 5 of the "Camera Clinicals" of January 1985 issue was, as he says, medullated nerve fibers, and totally unrelated to the hemorrhagic phenomenon accompanying the retinal arterial macroaneurysm shown in these figures.¹

I fully agree with Dr. Humayun in his comments on the anterior chamber foreign bodies. All patients with a history of trauma and inferior limbal edema should undergo a careful gonioscopic evaluation.

Khalid J. Awan, M.D.
Norton, Virginia

References

1. Awan, KJ: Pulsatile macroaneurysm of the superior temporal artery of the retina. Pak J Ophthalmol 1:65 and 98-99, 1985.

Honey as a Substitute for Healon® in Experimental Anterior Segment Surgery in Animals

The issue No. 3 (April, 1985) of the Pakistan Journal of Ophthalmology looks very good and I am delighted to see the Ophthalmic "Past-Pourri" and the report of the 10th Congress of the Asia-Pacific Academy. I read with interest the paper "Honey as a Substitute for

Healon® in Experimental Anterior Segment Surgery in Animals" in this issue.¹ It is my impression that honey is not sterile but this is solely an impression based on its dangers in the newborn.

Frank W. Newell, M.D.
Chicago, Illinois

References

1. Mansour, AM, and Traboulsi, EI: Honey as a substitute for Healon® in experimental anterior segment surgery in animals. Pak J Ophthalmol 1:136, 1985.

Reply

I read with interest the comment of Dr. Newell. As he pointed out, honey is not sterile in its natural form. I would like to discuss four subjects in that regard: (1) yeast isolation in honey (2) presence of toxic substances (3) antibacterial properties of honey (4) the characteristics of the ideal honey paste for probable use in ophthalmic research in animals.

Yeast Isolation in Honey: Six yeast species have been isolated in honey.¹ These include *Zygosaccharomyces*, *Saccharomyces*, *Nematospora*, *Schizosaccharomyces*, *Torula*, and *Schwanniomyces* species. These osmophilic yeasts can ferment honey even at its low water content. The sources of the yeasts include the bodies of the bees, the nectar, and the extracting and storage areas. Diluted honey seems to favor yeast growth and rapid fermentation of honey.

Toxicity of Honey: The instances of toxic reactions to the ingestion of honey are very few. Reports of mass poisoning attributed to honey date back to the expedition of Cyrus in 401 B.C. in Asia Minor. The toxic constituent is found in honey types from yellow jasmine, henbane, euphorbia and other flowers.¹

Antibacterial Properties of Honey: The belief in antiseptic and wound healing properties of honey is to be found in ancient and medieval medicine. Dold et al (1937) contended the finding of a heat-labile antibiotic and named it "inhibine". White et al (1963) found that the antibiotic effect of honey is due to the production of gluconic acid and hydrogen peroxide primarily from the activity of glucose oxidase. This finding was supported by other researchers.¹ We have to note that the relatively low water content of honey may prevent the growth of a wide spectrum of organisms.

The Ideal Honey Paste: Commercially available honey causes precipitation of sugars on the endothelial surface ("crystallisation"). This will ultimately lead to the death of endothelium. The corneal surface appears very clear upon instillation of honey on the cornea, and this is attributed to the high dehydrating property of honey. So a low-sugar honey will avoid the crystallisation of sugars on the inside of the cornea and endothelial microscopy can be then performed after the instillation of honey.

Ahmad Mansour, M.D.
Silver Spring, Maryland

Reference

1. White, JW: Honey - Adv Food Res 24: 287-374, 1978.

Problems Facing Young Pakistani Ophthalmologists

Asalam-o-alaikoom! First of all I must congratulate you on bringing out of an A-class Journal.

I am writing you for guidance and advice. Our seniors finished their training before the modern advances in ophthalmology came on the scene. This limits their capability to provide adequate training in advanced ophthalmic techniques to young ophthalmologists like me. The literary aspects of our profession are absolutely non-existent in Pakistan.

Sometimes I see patients with some peculiar findings that I cannot find in books. Obviously, there definitely are variations in disease patterns in Pakistan.

Please give me guidance how to study and record a case and how to write and publish a paper. The availability of facilities like EOG, ERG, ultrasound, flourescein angiography, etc. is extremely limited in Pakistan.

Is it possible to visit the U.S.A. to learn new

surgical techniques and other current therapeutic approaches?

Dr. Shahid Wahab
Karachi, Pakistan

Reply

Wa-alaikoom-ussalam! I thank Dr. Wahab for the compliment he paid me in regard to The Journal. The problems he discussed in his letter are universal in Pakistan, and I have been repeatedly asked about them by young ophthalmologists from all over the country. This has prompted me to draw attention to these issues by presenting my views in an editorial (SEE PAGE 180) and in an article (SEE PAGE 172) in this issue.^{1,2} I ask Dr. Wahab to carefully read both.

Khalid J. Awan, M.D.
Norton, Virginia

References

1. Awan, KJ: Ophthalmic teaching and training in Pakistan. Pak J Ophthalmol 1: , 1985.
2. Awan, KJ: Patient evaluation and medical records in ophthalmology. Pak J Ophthalmol 1:172, 1985.



Scholarship Schedules

Ophthalmological Society of Pakistan

1986 Annual Meeting, Quetta

March-April - (Dates to be announced)

Contact: Professor Sardar Ali Sheikh, President OSP
Nishtar Medical College, Multan, Pakistan

Pakistan Academy of Medical Science

1985 Board of Trustees Meeting

November 9, 1985

Baltimore, Maryland U.S.A.

25th International Congress of Ophthalmology

May 1986

The 25th International Congress of Ophthalmology will be held in Rome, Italy, in May 1986. A round table discussion of the possible applications of Chinese acupuncture in the field of Ophthalmology will also be held. For information, write Dr. Andreanoo, via Nomentana 60, 00161 Rome, Italy, or Dr. Poletti, CHG Tarbes, BP 111, 65012, Tarbes, Cedex, France.

American Academy of Ophthalmology

1985 Annual Meeting - September 29-October 3
San Francisco, California

Contact: Paul R. Lichter, M.D.,
Program Secretary AAO 1010 Wall Street
Ann Arbor, Michigan 48105

The Pakistan Academy of Medical Sciences (PAMS)

The Pakistan Academy of Medical Sciences (PAMS) is holding its Convocation in Pakistan in December, 1985. Gen. Muhammad Zia-ul-Haq, the President of Pakistan has accepted the invitation to present the Certificates of Fellowship to elected Fellows of the Academy. For further details contact: PAMS Offices, 1921 Park Ave., S.W., Norton, VA 24273 U.S.A. (703) 679-4567.

The International Oculoplastic Society

Application for Fellowships 1985 & 1986

Training in pre- and post-op care; surgical assistance, staff appointment. Includes liability insurance, limited funding and locum tenens. Minifellowships can also be arranged with multispecialty surgeons.

Thirteenth Annual Mid-Winter Interspecialty and International Oculoplastic Society Congress, Feb. 15-22, 1986 in Casa de Campo, Dominican Republic.

Contact: Program Coordinator c/o Dr. Pierre Guibor, The International Oculoplastic Society, 630 Park Avenue, New York, NY 10021 or telephone: (212) 734-1010, outside NY (800) 223-4500.

Current Concepts in Ophthalmology Courses

John Hopkins University

March 3-7, 1986, and Feb. 23-27, 1987

Dorado Beach, Puerto Rico

March 17-21, 1986 and March 16-20, 1987

Vail, Colorado

Contact: Office of Continuing Education, Johns Hopkins University School of Medicine, Turner 22, 720 Rutland Ave., Baltimore, MD 21205.



REFRACTIVE SURGERY: A TEXT OF RADIAL KERATOTOMY. Edited by Donald R. Sanders, MD, PhD and Robert F. Hofmann, MD, Hard Cover, Charles B. Slack, Inc., Thorofare, N.J. 11.1984, 239 pages, Price \$60.00.

According to this text, the "Decade of Refractive Surgery" has started - with the aim to treat the "dis" eases of myopia and astigmatism. This prediction is almost certainly correct, in my opinion. The evolving field already has its own terminology, technology, complications, and pathology; we can no longer ignore it.

The book offers well organized chapters by competent authors on the history, medico-legal aspects, case selection, preoperative evaluation, predictability, pathophysiology, equipment, technique, postoperative management, follow-up, results, and complications of these conditions. All this makes fascinating and informative reading. logical organization and concise writing are supported by well-selected illustrations and references for follow-up reading.

The book is highly recommended as an introduction for all who need to learn the basic facts about this new and quickly expanding development within the field of ophthalmology. — *Reviewed by J. Reimer Wolter, M.D.*

GENERAL OPHTHALMOLOGY. By Daniel Vaughan, M.D., and Taylor Asbury, M.D. Lange Medical Publications, Los Altos, California 94022 U.S.A. 1983, edition 10. Soft-bound, 408 pages. Price US\$17.00

The great popularity of this textbook can be measured by the fact that in its lifetime it has gone through a new edition every two to three years and has been translated into many foreign languages. Many authorities have extended help, including Khalid Tabbarra, M.D. as Consultant Editor, in their areas of expertise.

The book is divided into 26 chapters and has appendices on "Ophthalmoscopic Examination," "The CT Scan in Ophthalmologic Diagnosis," "Commonly Used Eye Medications," and "Visual Standards and Vocabulary of Terms Relating to the Eye." A well organized index is provided." The book is illustrated throughout with beautiful figures. One exception is a fundus photograph (Figure 13-27) showing angioid streaks. A demonstration of angioid streaks at not so advanced and heavily pigmented stage would have been more helpful. Many of the figures have been unnecessarily duplicated in the First Appendix. There are a few points that should be carefully considered for the next edition. Any details and the description of technique of applanation tonometry are skipped because "equipment is impractical for the nonophthalmologists," whereas a more complicated

procedure of gonioscopy is outlined in detail and almost a full page with three figures is devoted to an uncommonly used technique of keratotomy. In the description of gonioscopy, an explanation of what to look for in the angle of patients with glaucoma would have added to its value. On page 22, Schirmer's Test is declared to be abnormal when "less than 15 mm" of the strip become wet after 5 minutes, while in the chapter on tears, this figure is "less than 10 mm." Other contradictory statements concern the central retinal artery occlusion on page 40, "...retina is completely without blood as long as the artery is occluded" and on page 139, "As the retina has a dual supply, allowing it to survive longer...in the presence of central retinal artery occlusion." For the paracentesis in the treatment of central retinal artery occlusion on page 40 it is stated that the needle "with syringe" should be employed, but on page 139 it is "...needle, which is not attached to a syringe." Some non-conventional arrangement of subjects is present, such as Duane's retraction syndrome is described in the chapter on neuro-ophthalmology and not in the chapter on strabismus. Almost two thirds of the chapter on "Orbit" describes anatomy and only one third of the chapter is devoted to diseases. One serious mistake is to declare on page 343 that the topical use of phenylephrine hydrochloride (2.5-10%) produces no systemic side effects. There are a few other omissions, such as the absence of *Toxocara* endophthalmitis from the list of differential diagnosis of leukocoria, the term retinopathy of prematurity (ROP) for retrolental fibroplasia (RLF) and its occurrence in infants not receiving high concentration of oxygen, a mention of radial keratotomy, etc.

Ignore these minor criticisms and there are quiet a few things in General Ophthalmology that put it a cut above other texts of similar magnitude and intended purpose. The chapters on "Conjunctiva" and on "Cornea" are excellent. An introductory line that the condition should be treated by an ophthalmologist is included in the description of many serious ocular disorders, an instruction of great value to nonophthalmologists and emergency room physicians. The chapters on "Ocular Disorders Associated With Systemic Diseases," "Genetic Aspects," "Immunologic Diseases of the Eye," "Second Appendix: The CT Scan in Ophthalmologic Diagnosis," and "Fourth Appendix" are well written and highly useful. All chapters are accompanied by extremely useful lists of references that are current and into the eighties. In short, only an "Ophthalmic Scrooge" would deny the "medical students, ophthalmology residents, practicing ophthalmologists, and our colleagues in other fields of medicine and surgery" the excellent benefits of General Ophthalmology at an unbelievable price of \$17.00 in these times of sky rocketing inflation.

— *Reviewed by Khalid J. Awan, M.D.*



Abstracts From Elsewhere

Edited by Khalid J. Awan, M.D.

British Journal of Ophthalmology

ENDOPHTHALMITIS DUE TO CATERPILLAR SETAE: SURGICAL REMOVAL AND ELECTRON MICROSCOPIC APPEARANCES OF THE SETAE. C Steele, DR Lucas, and AEA Ridgway. The Manchester Royal Eye Hospital and the Departments of Ophthalmology and Pathology, University of Manchester. The authors successfully treated, for the first time, a case of endophthalmitis due to caterpillar setae. The use of sodium hyaluronidate facilitated the procedure. Evidence of enzymatic degradation of the shaft and burial of the spines in exudate was found on scanning and transmission electron microscopic examinations. (Brit J Ophthalmol 68:284-288, 1984). *Abstract by Khalid J. Awan, M.D.*

AUTOSOMAL DOMINANT VITREORETINO-CHOROIDOPATHY (ADVIRC). NP Blair, MF Goldberg, GA Fishman and T Salzano. The Department of Ophthalmology, College of Medicine, University of Illinois at Chicago, IL 60612, USA. A report of the second family recognized to have autosomal dominant vitreoretinchoroidopathy. The clinical features included autosomal dominant inheritance 360° peripheral, coarse pigmentary degeneration with a relatively discrete posterior border in the equatorial region, superficial punctate yellowish-white opacities in the retina, various vascular abnormalities, breakdown of the blood-retinal barrier, retinal neovascularisation, vitreous abnormalities, and choroidal atrophy. Macular edema or vitreous haemorrhage is the main cause of reduction in vision. (Brit J Ophthalmol 68:2-9, 1984). *Abstract by Khalid J. Awan, M.D.*

COMPARISON OF RETINAL AND CEREBRAL VASCULATURE IN TRYPSIN DIGEST PREPARATIONS. DG Cogan and T Kuwabara. The Neuro-ophthalmology Section and Laboratory of Vision Research, National Eye Institute, National Institutes of Health Bethesda, Maryland 20205, USA. A modified trypsin digestion technique for preparing flat mounts of the retina was used for comparable mounts of the cerebrocortical capillaries. A basic similarity between the two systems is reported. However, the cortical capillaries have larger diameters, more abundant collateral channels, and less regularly spaced mural cells or intramural pericytes. In contrast to the retinal vessels, the cortical capillaries did not show the right-angle branching of the precapillary arteriole and showed an excess basement membrane in the crotches of the

branches. (Brit J Ophthalmol 68: 10-12, 1984). *Abstract by Khalid J. Awan, M.D.*

POSTERIOR CHAMBER INTRAOCULAR LENSES AT THE WILMER INSTITUTE: A COMPARATIVE ANALYSIS OF COMPLICATIONS AND VISUAL RESULTS. WR Fagadau, AE Maumenee, WJ Stark, Jr, and M Datiles. The Wilmer Ophthalmological Institute, Baltimore, Maryland, USA. In selected cases, intraocular lens implantation is now accepted as the most effective means of aphakic correction. However, complications such as corneal oedema, retinal detachment, and cystoid macular oedema remain problematic. Authors present their experience with IOL implantation at the Wilmer Institute, with particular reference to the posterior chamber intraocular lens and with specific emphasis on postoperative complications. (Brit J Ophthalmol 68:13-18, 1984). *Abstract by Khalid J. Awan, M.D.*

INCONTINENTIA PIGMENTI (BLOCH-SULZBERGER SYNDROME) AND RETINAL CHANGES. J Francois. The Ophthalmological Clinic of the University of Ghent. About 80% of cases of incontinentia pigmenti are associated with various anomalies. Ocular abnormalities, particularly a retrolental mass with detachment of a dysplastic retina, are important. Retinal vascular changes, characterised at first by ectatic tortuous veins and arteriovenous anastomoses as well as by aneurysmal-like dilatations are responsible for these manifestations. (Brit J Ophthalmol 68:19-25, 1984). *Abstract by Khalid J. Awan, M.D.*

BIOMETRIC STUDIES OF THE EYEBALL AND RETINAL DETACHMENT. G Meyer-Schwickerath and E Gerke. Essen University Eye Clinic, Essen, West German. The relationship between axial length and equatorial diameter and eye volume is studied in intact emmetropic eyes, emmetropic eyes with retinal detachment, eyes with moderate myopia and retinal detachment, and eyes with high myopia and retinal detachment. It was determined that eyes with detached retinas, regardless of whether they are myopic or emmetropic, significantly differing dimensions from emmetropic control eyes. A significant increase in equatorial diameter and therefore in equatorial circumference is present. The eyes with detached retinas differ from normal eyes in their abnormally large size. (Brit J Ophthalmol 68:29-31, 1984). *Abstract by Khalid J. Awan, M.D.*

FUNDUS CHANGES IN PERSISTENT AND RECURRENT CHOROIDAL FOLDS. FW Newell. The Eye Research Laboratories, the University of Chicago, the Pritzker School of Medicine, 939 East 57th Street, Chicago, Illinois 60637, USA. The long-standing

choroidal folds show linear bead-like pigmentation in choroidal folds and diffuse nonspecific retinal pigment epithelial proliferation. Also, there may be linear streaks of scleral staining. (Brit J Ophthalmol 68:32-35, 1984). *Abstract by Khalid J. Awan, M.D.*

A CLINICOPATHOLOGICAL CASE OF RETINOPATHY OF PREMATURITY (ROP) TREATED BY PERIPHERAL CRYOPEXY. INissenkorn, IKremer, I Ben Sira, S Cohen, and A Garner. Department of Ophthalmology, Beilinson Medical center, Petah-Tiqva, and Tel Aviv University Sackler School of Medicine, Israel, and the Department of Pathology, Institute of Ophthalmology, London. In a baby born at 25 weeks gestation with a birth weight of 800g who suffered from respiratory distress syndrome, retinopathy of prematurity, stages II and III, was found in the right eye at the age of 1 month and in the left eye a month later. Both eyes received treatment by peripheral cryopexy. The pathological examination showed that peripheral cryopexy was effective in preventing progression of the retinopathy to cause severe cicatrization. (Brit J Ophthalmol 68:36-41, 1984). *Abstract by Khalid J. Awan, M.D.*

INTRAOCULAR PARAGONIMIASIS. WJ Wang, YJ Xin, NL Robinson, HW Ting, C Ni, and PK Kuo. The Department of Ophthalmology, Eye, Ear, Nose, and Throat Hospital of the Shanghai First Medical College, the Harvard Medical School, Howe Laboratory of Ophthalmology, Massachusetts Eye and Ear Infirmary, Boston, Massachusetts, and the Department of Parasitology, Shanghai First Medical College, Shanghai, People's Republic of China. Paragonimiasis is a chronic lung infection by the trematode paragonimus. It results from the ingestion of raw crustaceans contaminated by the trematode paragonimus. A 13-year-old Chinese boy had intraocular paragonimiasis. It manifested as repeated attacks of acute ocular pain associated with panuveitis. The ocular inflammatory and findings mimicking both perforating and contusion injuries caused by the migration of the fluke within the eye characterise ocular paragonimiasis. Authors successfully extracted the organism from the anterior chamber and identified it as *Paragonimus westermani*. (Brit J Ophthalmol 68:85-88, 1984). *Abstract by Khalid J. Awan, M.D.*

ASTIGMATISM FOLLOWING CATARACT SURGERY. VM Reading. The Department of Visual Science, Institute of Ophthalmology, Judd Street, London WC1H9QS. The author studied changes in corneal curvature at regular intervals over a one-year period following intracapsular cataract extraction by microsurgical techniques. Photokeratometric measurements showed rapid changes in astigmatism associated with large changes in the direction of the axis during the first postoperative month. Astigmatism against-the-rule predominated thereafter. Apparently, a smaller incision with lesser number of sutures is associated with smaller changes in the corneal

curvature. A procedure is outlined whereby surgically induced astigmatism may be minimized. (Brit J Ophthalmol 68:97-104, 1984). *Abstract by Khalid J. Awan, M.D.*

SCREENING FOR REFRACTIVE ERRORS IN 6-9 MONTH OLD INFANTS BY PHOTOREFRACTION. J Atkinson, OJ Braddick, K Durden, PG Watson, and S Atkinson. The Visual Development Unit, Department of Experimental Psychology, University of Cambridge; Addenbrooke's Hospital, Cambridge; and the Department of Community Medicine, Bristol and Weston Health Authority. The method of isotropic photorefraction was used in the refractive screening of 1,096 6-9 months old infants under cyclopentolate cycloplegia. Five percent were found to be hypermetropic (over +3.5 D), 4.5% myopic, and 1.3% anisometropic (over 1 D). These refractive errors were confirmed on retinoscopic follow-up. Only one small refractive error was missed in 52 infants. It was concluded that photorefraction is a valid and practical screening technique. (Brit J Ophthalmol 68:105-112, 1984). *Abstract by Khalid J. Awan, M.D.*

METASTATIC CARCINOMA OF THE IRIS SIMULATING IRIDOCYCLITIS. JJ Woog, J Chess, DM Albert, DK Dueker, FG Berson and J Craft. The Harvard Medical School, Massachusetts Eye and Ear Infirmary, Boston; Institute of Ophthalmology, University of Missouri Medical Center, Columbia; and Harvard Medical School, the Charles A. Dana Research Institute, Beth Israel Hospital, Boston USA. A 46-year old woman with a history of breast carcinoma and no known metastatic disease developed iridocyclitis and secondary glaucoma that failed to respond to standard medical therapy. A paracentesis was performed. Cytological examination of the aspirate showed adenocarcinoma, providing confirmation of statements that iridocyclitis may be the initial clinical manifestation of metastatic malignancy. In addition, this report emphasises the importance of paracentesis in the diagnostic evaluation of selected cases of anterior uveitis of unknown aetiology. Enucleation was performed when recurrence of uveitis and glaucoma developed following a temporary relief after two courses of radiotherapy. (Brit J Ophthalmol 68:167-173, 1984). *Abstract by Khalid J. Awan, M.D.*

PATHOGENESIS OF MOOREN'S ULCER: SOME NEW CONCEPTS. PI Murray and AHS Rahi. The Department of Pathology, Institute of Ophthalmology, University of London, and Moorfields Eye Hospital, London. Mooren's ulcer is a chronic, painful corneal ulceration of unknown aetiology that has been recently shown to have an autoimmune basis. The immune response appears to involve a subset of peripheral blood T lymphocytes known as suppressor cells. A qualitative or quantitative deficiency of suppressor cells may therefore be responsible for chronic inflammation, autoimmune disease, and immunodeficiency states. Authors studied the number of suppressor T cells in

addition to other immunological parameters in a patient with bilateral Mooren's ulcers, and found a deficiency of suppressor T cells in the peripheral blood. In the light of these findings, the authors raise the possibility of a new line of treatment for Mooren's ulcer. (Brit J Ophthalmol 68:182-187, 1984). *Abstract by Khalid J. Awan, M.D.*

HAEMOPHILUS INFLUENZAE CORNEAL ULCER IN A THERAPEUTIC CONTACT LENS WEARER. JR Armstrong, KL Cohen, and LR McCarthy. The Departments of Ophthalmology, and Bacteriology and Immunology, University of North Carolina School of Medicine, and North Carolina Memorial Hospital, Chapel Hill, USA. The unusual primary *H. influenzae* corneal ulcer as a complication of therapeutic contact lens wear is presented for the first time. The authors review the bacteriology of contact lens related corneal ulcers. (Brit J Ophthalmol 68:188-191, 1984). *Abstract by Khalid J. Awan, M.D.*

ORAL FLUORESCEIN AND CYSTOID MACULAR OEDEMA: DETECTION IN APHAKIC AND PSEUDOPHAKIC EYES. MJ Noble, H Cheng, and PM Jacobs. The Eye Hospital, Walton Street, Oxford. Thirty-eight consecutive patients orally received 1.25g of lemon-flavored fluorescein sodium 6 to 7 weeks after cataract surgery with and without iris clip lens implantation. It permitted satisfactory fluorography to detect all cases of clinical cystoid macular oedema. None of the patients developed any adverse reaction. (Brit J Ophthalmol 68:221-224, 1984). *Abstract by Khalid J. Awan, M.D.*

EFFECT OF OXYBUPROCAINE 0.4% IN PREVENTING SURGICALLY INDUCED MIOSIS. G Van Rij, JGC Benardel De Lavalette, GS Baarsma, and JTG Jansen. The Department of Ophthalmology, Erasmus University, Eye Hospital, Rotterdam, The Netherlands. In a double-blind study of 68 patients, the effect of preoperative oxybuprocaine 0.4% (Dorsacaine, Novesin) eye drops in comparison with a placebo in preventing surgically induced miosis during extracapsular cataract extraction was studied. One drop of oxybuprocaine 0.4% or placebo instilled 10 and 5 minutes preoperatively reduced the amount of pupil constriction during the operation. The anesthetic effect of oxybuprocaine on sensory nerves in the eye is considered to inhibit the release of a miotic substance. (Brit J Ophthalmol 68:248-251, 1984). *Abstract by Khalid J. Awan, M.D.*

OEDIPISM REVIEWED: A CASE OF BILATERAL OCULAR SELF-MUTILATION. K Stannard, T Leonard, G Holder, and J Shilling. The Department of Ophthalmology, St. Thomas's Hospital, London, and the Regional Unit of Neurophysiology, Brook General Hospital, London. A 26-year-old Negro male schizophrenic developed severe bilateral orbital injuries following attempted self-enucleation. Bilateral orbital oedema, with surgical emphysema and haemorrhage was confirmed by a CT Scan. The visual

evoked potential (VEP) was present only in the right eye. Systemic steroids in high doses effected rapid resolution of the orbital swelling and recovery of the vision in the right eye. (Brit J Ophthalmol 68:276-280, 1984). *Abstract by Khalid J. Awan, M.D.*

OCULAR INJURIES FROM CARBONATED SOFT DRINK BOTTLE EXPLOSIONS. MAI Salem and SMM Sheriff. The Eye Department, Ibn-Sina Hospital, Kuwait. From July 1981 to August 1982, sixteen patients developed ocular injuries due to explosion of glass bottles of carbonated soft drinks, serious enough to require admission to Ibn-Sina Hospital, Kuwait. Explosions of bottles was spontaneous in 11 cases (68.7%). The most important contributing factors were high environmental temperature and defective bottles. Preventive measures are suggested. (Brit J Ophthalmol 68:281-283, 1984). *Abstract by Khalid J. Awan, M.D.*

SHORT-TERM EFFECT OF SLIT-LAMP ILLUMINATION AND ARGON LASER LIGHT ON VISUAL FUNCTION OF DIABETIC AND NON-DIABETIC SUBJECTS. IM Ghafour, WS Foulds, and D Allan. The Tennent Institute of Ophthalmology, University of Glasgow, Western Infirmary, Glasgow G11 6NT, and the West of Scotland Health Boards, Department of Clinical Physics and Bio-Engineering, 11 West Graham Street, Glasgow G49LF. The authors studied visual acuity, colour vision, and contrast sensitivity of diabetic and non-diabetic subjects before, 20 minutes after, and 24 hours after exposure to slit-lamp illumination either alone or during argon laser photocoagulation. A significant deterioration of these visual functions was noted in some cases when the tests were repeated 20 minutes after light exposure, but by 24 hours after light exposure visual function of all groups had returned to pre-exposure levels. (Brit J Ophthalmol 68:298-302, 1984). *Abstract by Khalid J. Awan, M.D.*

CENTRAL SEROUS CHORIORETINOPATHY COMPLICATING SYSTEMIC CORTICOSTEROID TREATMENT. M Wakakura and S Ishikawa. The Department of Ophthalmology, Kitasato University, School of Medicine, 1-15-1 Kitasato, Sagami-hara, Kanagawa 228, Japan. Following a study of central serous chorioretinopathy that developed in 2 cases of retrobulbar neuritis during systemic treatment with corticosteroids, the authors suggested that high dosage corticosteroids may damage the posterior blood-ocular barrier. Leakage surrounded by central serous detachment of the retina was confirmed by fluorescein angiography. One patient developed central serous chorioretinopathy 3 times during 3 separate courses of treatment. Spontaneous recovery accompanied a reduction in steroid treatment to a low level. (Brit J Ophthalmol 68:329-331, 1984). *Abstract by Khalid J. Awan, M.D.*

PTERYGIUM AND ULTRAVIOLET RADIATION: A POSITIVE CORRELATION. DJ Moran and FC Hollows. The Department of Ophthalmology, Prince of

Wales Hospital, High Street, Randwick, New South Wales 2031, Australia. After examining more than 100,000 Aborigines and non-Aborigines in rural Australia, the authors found a strong positive correlation between climatic UV radiation and pterygium prevalence and interesting differences in prevalence in the different racial groups and between the sexes. (Brit J Ophthalmol 68:343-346, 1984). *Abstract by Khalid J. Awan, M.D.*

PARALYTIC STRABISMUS CORRECTION BY ADJUSTABLE SUTURE TECHNIQUE. PTC Docherty. Derbyshire Royal Infirmary, Derby. The author describes the surgical correction of four cases of paralytic strabismus in which the muscle is repositioned postoperatively with the active co-operation of the patient. The method of inserting the suture near the limbus, increases the degree of adjustability and allows for more extensive repositioning of the conjunctiva. (Brit J Ophthalmol 68:353-359, 1984). *Abstract by Khalid J. Awan, M.D.*

SIGNIFICANCE OF INTRAOCULAR PRESSURE MEASUREMENT IN SYSTEMIC HYPERTENSION. BJ Williams and JG Ledingham. The Nuffield Department of Medicine, John Radcliffe Hospital, Oxford. Morning and afternoon measurements of (i) mean level of intraocular pressure (IOP), (ii) variance of IOP, and (iii) rise of IOP associated with lying down were taken. No difference was found in normotensive individuals, but in subjects with untreated hypertension (UH) morning values of (i), (ii) and (iii) were all significantly elevated. Within each group morning and afternoon levels of systolic blood pressure (BP) remained constant but in UH the morning variance of systolic BP was elevated in proportion to the degree of hypertension. This disparate elevation resulted in highly significant correlations between levels and variance of systolic BP and IOP in the morning, gaining a possible explanation the tendency of retinal vein occlusion to occur in the morning. (Brit J Ophthalmol 68:383-388, 1984). *Abstract by Khalid J. Awan, M.D.*

POSTURAL CHANGE OF IOP IN NORMAL PERSONS AND IN PATIENTS WITH PRIMARY WIDE OPEN-ANGLE GLAUCOMA AND LOW-TENSION GLAUCOMA. S Tsukahara and T Sasaki. The Department of Ophthalmology, Yamanashi Medical College, Yamanashi, and the Suwa Red Cross Hospital, Nagano, Japan. The IOP after 30 minutes in the supine position measured by the pneumatograph was highest in normal persons, in patients with primary wide open-angle glaucoma and low-tension glaucoma. The patients with low-tension glaucoma showed the greatest difference in IOP between sitting and supine positions. (Brit J Ophthalmol 68:389-392, 1984). *Abstract by Khalid J. Awan, M.D.*

ORAL ACYCLOVIR IN THE MANAGEMENT OF DENDRITIC HERPETIC CORNEAL ULCERATION. SO Hung, A Patterson, DI Clark, and PJ Rees. St. Paul's

Eye Hospital, Liverpool and the Wellcome Research Laboratories, Beckenham, Kent. Thirty-one patients with herpetic dendritic corneal ulcers received minimal wiping debridement of the ulcer and oral acyclovir 400 mg or placebo 5 times daily for 7 days. At the end of study, 67% of dendritic ulcers in patients receiving acyclovir had healed compared with 43% in placebo recipients. The proportion of ulcers healed in the 2 groups at 7 days showed no significant difference ($p = 0.18$), but the rate of healing was significantly faster in the acyclovir group ($p = 0.03$) (Brit J Ophthalmol 68:398-400, 1984). *Abstract by Khalid J. Awan, M.D.*

EPIDEMIC ACUTE HAEMORRHAGIC CONJUNCTIVITIS IN LAGOS, NIGERIA. TE McMoli, AN Bordoh, GMR Munube, and EJ Bell. The Ophthalmology Unit, College of Medicine, University of Lagos; the Virology Section SHO, Lagos; and the Regional Virus Laboratory, Ruchill Hospital, Glasgow. Enterovirus 70 has been found to be a causative agent of epidemic acute haemorrhagic conjunctivitis (AHC). In a study of 126 Nigerian patients with hemorrhagic conjunctivitis due to enterovirus 70, despite numerous symptoms, including reduction in visual acuity, eventual recovery in 2 to 3 weeks with no functional loss was the rule except in 11 patients. Five of these patients developed superficial corneal scarring; two needed evisceration for unresolving panophthalmitis; while 4 went blind from ruptured corneal abscesses or ulcers. (Brit J Ophthalmol 68:401-404, 1984). *Abstract by Khalid J. Awan*

RAPID CULTURE TEST FOR ADENOVIRUS ISOLATION. S Darougar, P Walpita, U Thaker, N Viswalingam, and MS Wishart. The Institute of Ophthalmology, University of London, and Moorfields Eye Hospital, London. A rapid culture test for the detection of adenovirus in ocular infections requires only two days' incubation of the inoculated cell monolayers on coverslips in flat bottomed tubes followed by detection of adenovirus inclusions using immuno-fluorescence staining method. The sensitivity of this test is comparable with that of the conventional tissue culture test which depends on the development of a cytopathic effect requiring a mean of 9.4 days incubation. (Brit J Ophthalmol 68:405-408, 1984). *Abstract by Khalid J. Awan, M.D.*

ACUTE CONJUNCTIVITIS CAUSED BY AN ATYPICAL CHLAMYDIAL STRAIN: CHLAMYDIA IOL 207. T Forsey and S Darougar. The Subdepartment of Virology, Institute of Ophthalmology, University of London. *Chlamydia* IOL 207 was isolated from the eye, and rising titres of type-specific antibodies to *C. IOL 207*, in serum and tears were demonstrated in a man with acute conjunctivitis. *C. IOL 207*, an atypical chlamydial strain, is widespread in some communities. (Brit J Ophthalmol 68:409-411, 1984). *Abstract by Khalid J. Awan, M.D.*

SUCCESSFUL TREATMENT OF EXOGENOUS ASPERGILLUS ENDOPHTHALMITIS: A CASE REPORT. PC Ho, F I Tolentino, and AS Baker. **Massachusetts Eye and Ear Infirmary and the Eye Research Institute of Retina Foundation, Boston, USA.** The exogenous aspergillus endophthalmitis following penetrating injury and primary scleral wound repair in a 28-year-old man was for the first time successfully treated by repeated vitreous surgery with multiple intravitreal instillations of amphotericin B and intravenous antifungal therapy. A vigorous approach in the management of mycotic endophthalmitis resulted in eventual recovery of vision of 6/18. (Brit J Ophthalmol 68:412-415, 1984). *Abstract by Khalid J. Awan, M.D.*

VITRECTOMY AND FLUID/SILICONE-OIL EXCHANGE FOR GIANT RETINAL TEARS: RESULTS AT SIX MONTHS. PK Leaver, JR Cooling, EB Feretis, JS Lean, and D McLeod. **The Surgical Vitreoretinal Unit, Moorfields Eye Hospital, London.** Vitrectomy combined with fluid/silicone-oil exchange in 73 eyes with giant retinal tears gave initial anatomical success in 71 out of 73 eyes (97%) and, prior to removal of silicone-oil, in 66 out of 73 eyes (90%). In 63 eyes (86%) the retina remained attached six months after surgery, with a visual acuity of 6/60 or better in 44 (70%). The high incidence of macular detachment before surgery and the frequency of macular abnormalities account for reduced vision in many of the anatomically successful cases. (Brit J Ophthalmol 68:432-438, 1984). *Abstract by Khalid J. Awan, M.D.*

BILATERAL CENTRAL SCOTOMATA DUE TO INTRACRANIAL TUMOUR. NGR Page and MD Sanders. **The National Hospitals for Nervous Diseases, Queen Square, London WCI.** Bilateral centrocaecal scotomata are characteristically seen in patients with intrinsic optic nerve disease, usually associated with hereditary optic neuropathy, and nutritional or toxic amblyopias, report four patients with central scotomata due to intracranial masses. Three patients recovered after surgical intervention. Headaches, other neurological signs, and central visual loss may point to an intracranial tumour. (Brit J Ophthalmol 68:449-457, 1984). *Abstract by Khalid J. Awan, M.D.*

TUMORS OF THE MOLL'S GLANDS. C Ni, M Wagoner, S Kieval, and DM Albert. **The Eye Research Institute of Retina Foundation, Boston, and the Massachusetts Eye and Ear Infirmary and Harvard Medical School, Boston USA.** The authors report two benign mixed tumours of the skin (chondroid syringomas) and two adenocarcinomas arising from Moll's Glands. Three of the patients were over 40 years old. Contrary to the common belief, the two adenocarcinomas described here were highly malignant. In spite of orbital exenteration and lymph node resection, one rapidly ended in death and the other recurred with extensive involvement of the paranasal sinuses. (Brit J Ophthalmol 68:502-506, 1984). *Abstract by Khalid J. Awan, M.D.*

RECONSTRUCTION OF THE LOWER LID. FJ Steinkogler. **The Second University Eye Clinic, Vienna, Austria.** The reconstruction of larger defects (more than one-third) can be done with free grafts or with flaps. Various types of pedicle flaps (full thickness, tarsoconjunctival, combined) from the upper lid give better results than free grafts. The author describes a convenient method of lower lid replacement with a medial pedicle rotation flap of the cheek and its advantages over the temporal pedicle cheek flap or the frontal flap. (Brit J Ophthalmol 68:507-510, 1984). *Abstract by Khalid J. Awan, M.D.*

PATHOGENESIS OF TEARS OF THE RETINAL PIGMENT EPITHELIUM. J Donald M Gass. **The Department of Ophthalmology, Bascom Palmer Eye Institute, University of Miami Medical School, Miami, Florida, USA.** The author confirms a previous report on the characteristic ophthalmoscopic and fluorescein angiographic appearance in the elderly patients with serous detachments of the pigment epithelium prior to and after developing a pigment epithelial tear at one border. He presents evidence that subpigment epithelial choroidal neovascularisation and not irregular separation of the basement membrane from its pigment epithelium is the primary cause of the detachment and tear in the pigment epithelium. (Brit J Ophthalmol 68:513-519, 1984). *Abstract by Khalid J. Awan, M.D.*

BACTERIAL CONTAMINATION OF INTRAOCULAR LENS SURGERY. GC Vafidis, RJ Marsh, and AR Stacey. **The Western Ophthalmic Hospital, Marylebone Road, London NW1, and the Department of Medical Microbiology, Medical School, St. Mary's Hospital, Praed Street, London W2.** The authors placed one hundred sterile intraocular lenses on the external eye of 50 patients. A culture for bacteria on half of the lenses and the examination under the light microscope after fixing and staining on the other half revealed a bacterial contamination rate of 26%. This is significantly higher than that found in conjunctival swabs (6%), in irrigation specimens (8%), or in a group of control lenses (15.2%) exposed to operating theatre air alone. The authors propose that implantation of intraocular lenses contaminated with viable bacteria may be responsible for some cases of postoperative uveitis in the pseudophakic eye. (Brit J Ophthalmol 68:520-523, 1984). *Abstract by Khalid J. Awan*

COMPARATIVE BACTERIOLOGY OF CHRONIC BLEPHARITIS. JM Dougherty and JP McCulley. **The Department of Ophthalmology, University of Texas Southwestern Medical School, USA.** The authors compared 115 patients with chronic blepharitis with 47 normal controls. Six clinically distinct groups of blepharitis were: (1) staphylococcal, (2) seborrhoeic, (3) seborrhoeic with associated staphylococcal superinfection, (4) meibomian seborrhoea, (5) secondary inflammation of the meibomian glands, and (6) meibomian keratoconjunctivitis (MKC).

Staphylococcus aureus was isolated in appreciable frequency from the staphylococcal and the mixed varieties. The most common isolated bacteria from the lid for all groups were coagulase-negative *Staphylococcus* spp., *Propionibacterium acnes*, and corneform bacteria. Cultures of material expressed from the meibomian glands yielded similar organisms but in reduced frequency. *Staph aureus* was usually sensitive to most commonly used ophthalmic antimicrobials except sulphonamides. (Brit J Ophthalmol 68:524-528, 1984). Abstract by Khalid J. Awan, M.D.

BLEPHAROPHIMOSIS AND ITS ASSOCIATION WITH FEMALE INFERTILITY. CA Jones and JRO Collin. Moorfields Eye Hospital, City Road, London EC1V2PD. The previously suggested high incidence of menstrual irregularity and infertility in females with the blepharophimosis syndrome is confirmed in a study conducted by the authors. (Brit J Ophthalmol 68:533-534, 1984). Abstract by Khalid J. Awan, M.D.

TRAUMATIC THIRD NERVE PALSY. JS Elston. Moorfields Eye Hospital, City Road, London EC1V2PD. Twenty patients, average age 25, 6 males and 4 females, who sustained a closed head injury with prolonged loss of consciousness in a high-speed deceleration accident had a traumatic third nerve palsy. Skull or facial fractures were present in 7, damage to the anterior visual pathways in 5, and other permanent neurological damage in 16. Nineteen developed the misdirection/regeneration syndrome. Strabismus surgery was performed on 13, and an area of binocular single vision was enlarged or achieved in three. (Brit J Ophthalmol 68:538-543, 1984). Abstract by Khalid J. Awan, M.D.

SEVERE OCULAR SIDE EFFECTS OF PERHEXILENE MALEATE: CASE REPORT. JM Gibson, AR Fielder, A Garner, and P Millac. The Department of Ophthalmology, University of Leicester School of Medicine, the Department of Pathology, Institute of Ophthalmology, Cayton Street, London, and the Department of Neurology, Leicester Royal Infirmary. The ocular toxic effects of perhexilene maleate (PEXID), an antianginal drug, in a 62-year-old man included caused loss of vision secondary to chronic papilloedema and vortex keratopathy similar to that seen in amiodarone keratopathy. This report gives corneal and conjunctival biopsy findings. The papilloedema and keratopathy subsided, with some remaining visual deficit, when the drug was discontinued. (Brit J Ophthalmol 68:553-560, 1984). Abstract by Khalid J. Awan, M.D.

ORBITAL DERMoids: CLINICAL PRESENTATION AND MANAGEMENT. RP Sherman, J Rootman, and JS Lapointe. The Department of Ophthalmology, University of British Columbia, Vancouver; the Department of Ophthalmology and Pathology, University of British Columbia and

Vancouver General Hospital, Vancouver; and the Department of Radiology, Vancouver General Hospital, Vancouver, Canada. The authors discuss sites of origin, presentation, differential diagnosis, and management of 15 cases of orbital dermoids representing 60% of orbital tumours seen at the University of British Columbia Orbital Clinic. These tumors tended to occur as either asymptomatic superficial lesions in children or as complicated deep lesions in adolescents and adults. The superficial lesions were treated by a direct uncomplicated surgical approach. The deep lesions in contrast, frequently required extensive and difficult procedures after a careful preoperative planning. (Brit J Ophthalmol 68:642-652, 1984). Abstract by Khalid J. Awan

PREVALENCE OF ACUTE CONJUNCTIVITIS CAUSED BY CHLAMYDIA, ADENOVIRUS, AND HERPES SIMPLEX VIRUS IN AN OPHTHALMIC CASUALTY DEPARTMENT. PK Wishart, C James, MS Wishart, and S Darougar. Moorfields Eye Hospital, High Holborn, London WC1, and the Subdepartments of Virology, Institute of Ophthalmology, Judd Street, London WC1. In a study of 140 consecutive patients of acute conjunctivitis, *Chlamydia trachomatis*, adenovirus, or herpes simplex virus was found in 52 (37%) cases. The authors discuss importance of these findings, the role of laboratory investigations in the differential diagnosis of acute conjunctivitis and their cost-benefit. (Brit J Ophthalmol 68:653-655, 1984). Abstract by Khalid J. Awan, M.D.

RETROLENTAL FIBROPLASIA NOW RETINOPATHY OF PREMATURITY, (EDITORIAL). N Ashton. Institute of Ophthalmology, London VCI. A new clinical classification for retrolental fibroplasia has been prepared by a committee of international authorities under the chairmanship of Professor Alec Garner, of London. The committee recommends the discontinuation of use of the original neologism, retrolental fibroplasia, since it describes only the final stages of a non-specific scarring behind the lens, without distinguishing the condition from other types of leukocoria. The alternative name, retinopathy of prematurity, is more apt. The recent resurgence of ROP has paralleled with advances in the quality of neonatal care which has resulted in the survival of premature infants of very low birth weight who are at the greatest risk of developing the disease. In the United States of America, it has been estimated that the annual number of infants blinded in 1979 was 546, a figure comparable to that recorded during the peak years of the original epidemic of 1943-53. This has created doubts about the role of oxygen as the important aetiological factor, and many cases of ROP are now occurring despite meticulous control of oxygen administration and even where no supplemental oxygen has been administered. Some clinicians are re-examining the possible role of the many other abnormal factors directly or indirectly associated with prematurity. The exact biochemical events which lead to oxygen vasoobliteration are

unknown and may well be set in motion by something other than oxygen. Hence, no certain opinions can at present be expressed as to the causes of the ROP. (Brit J Ophthalmol 68:689, 1984). *Abstract by Khalid J. Awan, M.D.*

CHRONIC OCULAR ISCHAEMIA. GD Sturrock and HR Mueller. The University Eye Clinic, Basel, and the department of Neurology University of Basel, Switzerland. Seven patients, aged between 59 and 77 years, with severe carotid artery disease, confirmed by Doppler sonography, were studied for the ocular changes due to chronic ischaemia. The authors discuss the treatment of chronic ocular ischaemia, including the role of carotid bypass surgery, which is mentioned briefly. Three patients out of a total of seven died of cardiovascular or cerebrovascular disease within 6 to 18 months of presentation. (Brit J Ophthalmol 68:716-723, 1984). *Abstract by Khalid J. Awan, M.D.*

T-LMPHOCYTE SUBPOPULATIONS IN UVEITIS. PI Murray, WJ Dinning, and AHS Rahi. The Institute of Ophthalmology and Moorfields Eye Hospital, London. In 25 patients with acute anterior uveitis, venous blood lymphocytes were examined at intervals throughout the course of the illness, from presentation until six months later. The authors found no changes in E-rosetting T cells or total lymphocyte values, nor any variations from normal in the helper (OKT4)/suppressor (OKT8) T-cell ratio. A random sampling of patients with heterochromic cyclitis also failed to reveal consistent abnormalities in peripheral blood lymphocyte parameters. (Brit J Ophthalmol 68:746-749, 1984). *Abstract by Khalid J. Awan, M.D.*

SURGICAL MANAGEMENT FOR ABNORMAL HEAD POSITION IN NYSTAGMUS: THE AUGMENTED MODIFIED KESTENBAUM PROCEDURE. LB Nelson, LD Ervin-Mulvey, JH Calhoun, RD Harley, and MS Keisler. The Department of Pediatric Ophthalmology and Strabismus, Wills Eye Hospital, Philadelphia, Pennsylvania, USA. Surgical procedures in patients with nystagmus and an eccentric null point in lateral gaze causing an abnormal head position to maximise visual acuity can result in significant undercorrection of the head turn. The authors report that the augmented modified Kestenbaum procedure showed a sustained improvement in head position in 15 patients for an average of 33 months. (Brit J Ophthalmol 68:796-800, 1984). *Abstract by Khalid J. Awan, M.D.*

TREATMENT OF CHALAZIONS WITH INJECTION OF A STEROID SUSPENSION. AP Watson and DJ Austin. The Department of Ophthalmology, Clinical Sciences Building, Leicester Royal Infirmary, PO Box 65, Leicester LE27LX. The authors compared the efficacy of the treatment of chalazions by injection of triamcinolone acetonide with conventional incision and curettage. Seventy-seven percent of the 39 injected cases resolved completely, though 54% of the injected cases required a second injection. In the 30 surgically treated cases, 90% showed resolution, but 27%

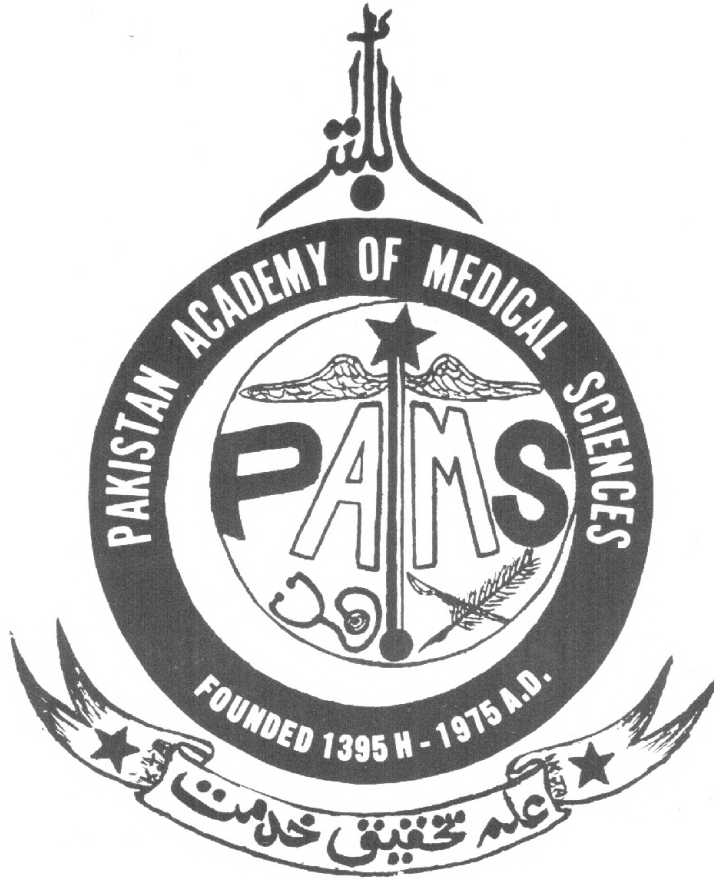
required a second operation. Injection of a steroid suspension is a convenient and effective alternative to the standard surgical management of chalazions. (Brit J Ophthalmol 68:833-835, 1984). *Abstract by Khalid J. Awan, M.D.*

INTRALESIONAL CORTICOSTEROID THERAPY OF CHALAZIA: A COMPARISON WITH INCISION AND CURETTAGE. PM Jacobs, VT Thaller, and D Wong. Moorfields Eye Hospital, City Road, London EC12PD. The authors randomly allocated the patients with chalazia to treatment by a single intralesional triamcinolone hexacetonide 0.05 ml to 0.2 ml of 5 mg/ml solution injection, or incision and curettage. They found that incision and curettage resulted in a significantly higher rate of resolution by two weeks after treatment. (Brit J Ophthalmol 68:836-837, 1984). *Abstract by Khalid J. Awan, M.D.*

ULTRASTRUCTURAL APPEARANCES OF A LENS WITH MARKED POLYCHROMATIC LUSTRE: EVIDENCE FOR DIFFRACTION AS A CAUSE. BP Hayes and RF Fisher. The Department of Visual Science, Institute of Ophthalmology, Judd Street, London WC1H9QS. The authors examined a human lens with a Christmas tree cataract showing polychromatic lustre by slit-lamp photography, thin-section light microscopy, and electron microscopy. They noted fibroblast-like anterior epithelial cells, and an area of breakdown of cortical lens fibres in the anterior lens, containing feathery fibres, whorls, and process bodies. Also were found parallel sided stacks of fused cell membranes beneath the watery area at the same depth as the polychromatic lustre seen in the slit-lamp. These membrane plates have dimensions that are consistent with the diffraction of light by a parallel thin film to give coloured points of light. The main trunk-like opacity and its branches seen with the slit-lamp are associated with deeper areas of small granules between the lens fibres. (Brit J Ophthalmol 68:850-858, 1984). *Abstract by Khalid J. Awan, M.D.*

LOW-CONTRAST LETTER CHARTS IN EARLY DIABETIC RETINOPATHY, OCULAR HYPERTENSION, GLAUCOMA, AND PARKINSON'S DISEASE. D Regan and D Neima. The Department of Ophthalmology, Dalhousie University, Halifax, Nova Scotia. Diabetes can cause visual loss that escapes detection by standard reading tests such as the Snellen test but can be detected by low-contrast letter charts. This visual loss is not related to any refractive error. These low-contrast charts are inexpensive and diagnostically at least as sensitive as the sinewave grating contrast sensitivity test. The test is brief and simple. On the basis of preliminary evidence it is concluded that patients with diabetes who have abnormal low-contrast chart results give abnormal intravenous fluorescein (IVF) test results, even though visual acuity is normal. Visual loss in ocular hypertension, glaucoma, and Parkinson's disease, including patients with normal visual acuity can be detected by low-contrast charts. (Brit J Ophthalmol 68:885-889, 1984). *Abstract by Khalid J. Awan, M.D.*

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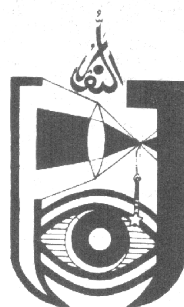
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