Abstract:

An 11 years old boy was diagnosed by 2 celebrated ophthalmologists in Baghdad to have infectious keratitis and endophthalmitis in his left eye refractory to all types of treatment and they decided to eviscerate it. His mother wished to postpone that and brought him under my care for medical treatment and follow up. Astonishingly this policy, contrary to our traditions, yielded constant, though slow, improvement to finally end up, in 6 months period, into a quiet eye with a smallish, flat corneal opacity, and a vision of 6/36+ after mydriasis.

Introduction:

Most of the classical textbooks of ophthalmology do not mention anything about corneal keloids. Only the biggest of them (1), and the more specialized (2), in addition to the traditional textbooks of ocular pathology (3), did mention few lines about the subject and again not as a separate clear cut clinical entity but as a very rare aberrant, vague corneal reaction subject to debate and controversy (4). Because the well known surgical rule of ," if you know what to do to the patient you need not bother much about the diagnosis." is applicable here, and it was quite obvious from the history and the alarming look of the eye of the poor boy, our seniors saw no doubt whatsoever that evisceration should be done. The aim of presenting this case is to demonstrate how scientific tradition can be sometimes catastrophic and the need to follow a more conservative policy when it comes to decisions to carry out destructive surgery.

Case history:

The patient was of a seminomadic origin from a distant village in the suburbs of Hilla. He was brought to my private clinic by his mother, grandfather and his uncles. They were all alarmed and troubled especially the mother. The condition had started 2 weeks previously as a red eye diagnosed by a well known Hilla specialist to be infective keratitis and endophthalmitis, and he started him on topical, systemic and subconjunctival antibiotics. Relatives and mother did not agree on hospital admission. Having noticed no much improvement in the first few days they decided to take him to Baghdad. A famous ophthalmologist there gave treatment for 3 days with no benefit so he decided to eviscerate the eye and, furthermore, he told them that if they do not do that the life of the boy will be in danger. Because they could n’t afford to pay for the surgery, they took him to another celebrated ophthalmologist to do the surgery in a government hospital, but again this was not possible. So this ophthalmologist sent them to me to do it in Alhilla general teaching hospital.

On examination: the boy, apart from his alarmed state looked nontoxic, his
The periorbital region was much swollen but there was no proptosis. The eye was red swollen, and there was a very peculiar look of the cornea; a glistening, white, fluffy, protuberant avascular mass was occupying most of the corneal surface leaving only a small upper temporal crescent of normal cornea. This very strange looking mass was heaped up to a height of 4-6 mm. above the corneal surface level.

Lid closure over the mass was not possible, and intraocular details were hidden.

I told the mother that there is no danger to life of the boy and I can do evisceration to him.

Relieved of the urge of death threat, she pleaded to postpone the surgery since she had only this son and his father had left them. But they again refused to admit him to hospital and claimed that they can bring him to the clinic daily. I started him on subconjunctival garamycin 20 mg. and dexamethasone 2mg. every other day; the first 6 days I put him on ampiclox 500 mg.I.M bid, and garamycin 80 mg. I.M bid; oral septrin 1x2 and topical Gutt. fortified gentamicin and Gutt. Chloramphenicol and Gutt. Dexamethasone hourly and Occ. Chloramphenicol + dexamethasone at bedtime.

In the first 6 days the improvement was not much noticeable but the mother and child were happy just because they found a doctor who accept to carry out the conservative policy. After 10 days the improvement was undeniable so I stopped subconjunctival therapy. Parenteral antibiotics were also stopped and the follow up was made every 3 days. At the end of the third week it was crystal clear that there was something missed here. There was no need for antibiotics and no question of evisceration any more. Examining the eye at this period in addition to the results of examination of the right eye revealed that the boy is having a very severe degree of vernal keratoconjunctivitis and what we all were dealing with was an exaggerated corneal response to a shield ulcer in the left eye. At present, the corneal surface is smooth, there is an oval corneal opacity of 4x5 mm. slightly to the lower nasal paracentral region with a small corresponding iris touch from behind making the pupil not fully dilatable. Visual acuity after mydriasis is 6/36+. Now it is 11 years after that event and every time I see this patient, this uneasy feeling comes to me that this quiet, partially functioning eye could have been wrongly eviscerated.

Discussion:

Inspite that this condition is known since 1865(5), and there is quite a good quantity of material on it , it remains a mysterious subject to most practicing ophthalmologists. I think that the problem lies in unpopularization; it needs some propaganda accompanied by good quality photots. It's being a rarity is another misfortune.

The signs of acute inflammation that I first noticed on the patient were, definitely, at least partly, due to the variety of treatments and interferences he was subjected to. Since at that time I had not heard of the condition before, I accepted their diagnosis and their evisceration decision (the last ophthalmologist to see the patient in Baghdad was my direct teacher and trainer).

On my treatment the initially delayed response was probably due to the huge size of the lesion, and the later
response was not due to the antibiotics but the steroids.

What made me willing to report this case are 3 reasons:

1- The condition is rare and need to be kept in mind if we want not to miss it.

2- The favourable outcome here is exceptional.

3- The report of a corneal keloid following a shield ulcer due to vernal keratoconjunctivitis is unique.

Cases in the literature were mainly following trauma (6), surgery (7), corneal penetration (8), inflammation (9) or they were congenital (10). Many cases were reported to be associated with Lowe's syndrome (11), few with Rubinstein Taybi syndrome (12), and one with fibrodysplasia ossificans progressiva (13). It affected mainly young people of negro or Asian origin. For the diagnosis I don't advice biopsy but to depend on the history and clinical picture. Regarding treatment I advice a conservative policy on medical treatment based on steroids mainly topically and subconjunctivally and watching for, and intervening only when, there is an imminent risk of visual loss.

Late corrective procedures may include lamellar (14), penetrating (15, 16), or sclerokeratoplasty (17). My personal feeling is that if the shield ulcer of this unfortunate patient was properly managed i.e: using steroids from the start, mast cell stabilizers, ocular lubricants, topical antihistamines and vasoconstrictor combinations, removal of mucus plaques and systemic antihistamines and steroids, this keloid would have been probably prevented (18, 19).

References:


Evaluation of five commercially available pregnancy test kits for detection of hCG in urine and serum samples

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Abstract