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Fuch's heterochromic iridocylitics in Ibadan

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SUMMARY An uncommon form of uveitis, Fuch's heterochromic iridocyclitis is presented in 8 patients seen at the eye clinic of the University College Hospital. The spectrum of the disease is discussed in the African eye.

Key words: Fuch's heterochromic iridocyclitis, uveitis

Introduction

Fuch's heterochromic iridocyclitis was first described in 1906[1] and reviewed extensively in 1973[2]. It is not a common condition, with estimates of incidence at between 1.5% and 4.5%[3] of referred uveitis cases. However its almost universal association with the development of cataract[4,5], which often progresses to maturity and profound visual loss, together with the young age of presentation and predominantly unilateral nature have important implications for management, if the best visual outcome is to be achieved[3].

We report 8 cases of Fuch's heterochromic iridocyclitis seen at the eye clinic of the University College Hospital, Ibadan.

This is the first time this disease entity is being reported in the Nigerian population.

Materials and methods

All patients seen over a 6 years period 1988-1994 diagnosed as having Fuch's heterochromic iridocyclitis were included in the study. The diagnosis was based on the findings of a few cells and mild flare in the anterior chamber, scattered small white keratic precipitates and absence of posterior synechiae[3,6].
The presence of cataract and glaucoma were also sought.

Heterochromia was not used as a diagnostic tool[7] although it was noted when present, as this is a variable findings in blacks[8]. The age and sex of the patients were noted as well as the reason for presentation and the eye involved. Visual acuity at presentation, pre- and post-operatively for the affected eye were recorded as well as the visual acuity of the unaffected eye. The type of surgery the patient underwent as well as the intra and post operative complications were also noted.

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Results

8 patients were diagnosed as having Fuch's heterochromic iridocyclitis (FHI) within a six year period 1988-1994.

Prior to 1988, the incidence of FHI was less than 1% of all new uveitis cases but in 1988 when all the doctors in the eye clinic of this tertiary institution become more aware of the disease, the incidence shot up to 4.4% of all new uveitis cases. In 1990 alone 4 patients were diagnosed as having FHI out of 42 new uveitis patients (9.5%). Since then the incidence has once again dropped to 2-4% per year. Out of the 8 patients, 6 were males and 2 were females, a 3:1, male:female ratio. All cases were unilateral. The age range of the patients was between 10-45 years of age, the youngest being 10 years old, Table 1. The right eye was involved in 5 patients while the left was involved in 3.

7 out of the 8 patients presented with gradual painless loss of vision and were found to have mature cataracts. The eighth patient presented with a low grade uveitis in an eye with good vision (6/6) and 9 years later developed a cataract.

All 8 patients on presentation had a low grade unilateral uveitis with a few cells and flare in the anterior chamber, scattered small white keratic precipitates all over the entire corneal endothelium and a remarkable absence of posterior synechiae.

Visual acuity on presentation was counting fingers or worse in 7 cases while the eighth case had a vision of 6/6 which gradually deteriorated over the next 9 years to hand movement because of cataract.

Visual acuity in the other eye of all 8 patients was between 6/4 and 6/5 unaided, with no evidence of uveitis or cataract. Only 2 out of the 8 cases (25%) had macroscopic heterochromia, seen as evidenced by patches of iris-atrophy, a 25 year old man and a 42 year old woman.

Intraocular pressure on presentation in the affected eye was below 14mmHg in all 8 patients. There was no evidence of glaucoma on presentation, pre-operatively and post-operatively for those who had surgery. All 8 patients were booked for cataract extraction by the extracapsular method as they were all below the age of 50 years. Only 4 patients out of the 8 turned up for surgery, the other 4 defaulted, presumably because they had good vision in the other eye. The duration between presentation and surgery in the 4 surgical cases was 2 months in 3 cases and 8 months in one case. There were no intraoperative complications but post-operatively, 3 out of the 4 cases had increased uveitis which had to be treated with hourly to 2 hourly topical dexamethasone and mydriatic and this settled down within the first post-operative week.

The 3 patients with increased uveitis developed mild posterior synechiae and one patient developed a thickened capsule. Only the patient who did not have an increased uveitis turned up for post-operative refraction and vision improved from count fingers pre-operatively to 6/12 post-operatively, her optic disc was found to be slightly pale which would explain the slight drop in visual acuity. The other 3 patients had an unaided vision of count fingers post-operatively but did not keep their refraction appointment and so the best visual acuity could not be documented.

TABLE 1: *Age distribution of patients with FHI*

AGE GROUP	NUMBER
10 - 19	3
20 - 29	3
30 - 39	0
40 - 49	2
TOTAL	8

Discussion

Fuch's heterochromic iridocyclitis (FHI) is an uncommon chronic uveitis, albeit less aggressive than other forms of uveitis[3], with estimate of its incidence at between 1.5% and 4.5%[3,9] of referred uveitis cases. It is almost universally associated with the development of cataract[4,5] which often progresses to maturity and profound visual loss. It is found mainly in the younger age group, the youngest in literature being 8 years of age[8]

The characteristic low grade chronic uveitis, with a few cells and a mild flare in the anterior chamber, associated with scattered small white keratic precipitates, and the absence of posterior synechiae must be present before the diagnosis can be made [3,6]. It is usually unilateral[3] and could be associated with heterochromia[2], cataract[4,5] and glaucoma[3,7] although not all need to be present to make a diagnosis. Heterochromia has been found not to be a constant feature although when present it strengthens the diagnosis. It has been found to be a variable finding in blacks[8] and in our study 2 out of the 8 patients (25%) presented with heterochromia. Jones in his study[7], noted that the presence or absence of macroscopic heterochromia is not a helpful component of the ocular examination and should play little part in diagnosis. In the 8 patients presented, all had the characteristic low grade uveitis with absence of posterior synechiae. 7 presented with painless loss of vision due to cataract, the eighth patient developing a cataract 9 years later.

None of our patients presented with glaucoma neither was there any increase intraocular pressure postoperatively as reported in some patients by other authors[3,7]. Glaucoma is a well known association of FHI occurring in about 26.2% - 59% of all cases in some studies on long term follow up[5,7] and 25% of all post-operative cases in another study[3]. The glaucoma associated with FHI is also known to respond poorly to both medical and surgical management. In our series, no patient had glaucoma but our series is too small to make any substantial assumption as to its incidence in our community. The 4 patients who went on to surgery had planned extracapsular cataract extraction under general anaesthesia. They had a seemingly uneventful post operative period with no major complications except for a slight increase in intraocular inflammation in 3 patients which resolved on intensive steroids over the next one week.

In a previous study by Jakeman et al,[3] an incidence of 20% was recorded for postoperative severe uveitis which settled on intensive topical steroids over a 2 week period. Some of these patients had a residual partial pupillary membrane and posterior synechiae which required synechyolysis under local anaesthesia. 3 of our 4 surgical cases had residual posterior synechiae and one of the 3 developed opacity of the posterior capsule.

In conclusion, Fuch's heterochromic iridocyclitis, although an uncommon form of uveitis, if sought for, can be found in the Nigerian setting at about the same incidence as other races[3,9]. The presence of this form of uveitis should encourage the surgeon to go ahead

with cataract extraction when a cataract is present as it is not associated with the stormy post-operative period that other forms of uveitis are noted for. Increase in the inflammatory response in the anterior chamber may occur post-operatively but this could be successfully treated with intensive topical steroids and mydriatics.

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