

Ocular disease in patients with tuberculosis and HIV presenting with fever in Africa

N A V Beare **J G Kublin**
D K Lewis **M J Schijffelen**
R P H Peters **G Joaki**
J Kumwenda **E E Zijlstra**

Aims: To investigate ocular disease in patients with tuberculosis (TB) and HIV in Africa presenting with fever, and to determine if indirect ophthalmoscopy is useful in the diagnosis of mycobacteraemia.

Methods: A prospective study of all adult patients admitted with fever to a large central hospital in Malawi, Africa. All recruited patients had an ophthalmic examination, HIV tests, chest xray, sputum examina-

tions, bacterial and mycobacterial blood cultures, and malaria slide to observe the presence of parasites.

Results: 307 patients were recruited; 109 (36%) had TB, including 53 (17%) with mycobacteraemia; 255 (83%) had HIV and 191 (62%) had AIDS. Of the patients with TB, 102 (94%) had HIV. Choroidal granulomas were found in four patients, all of whom had AIDS; three (2.8% of those with TB) had disseminated TB with mycobacteraemia, and one had persistent fever but no other evidence of TB. Among the patients with AIDS, 32 (17%) had microangiopathy manifest by cotton wool spots; one (0.5%) had signs of active

cytomegalovirus (CMV) retinitis. The presence of microangiopathy was not related to TB.

Conclusions: In Malawian patients with TB presenting acutely with fever, choroidal granulomas were found in 2.8%, and were concurrent with mycobacteraemia and AIDS. Ophthalmoscopy was not a useful aid in the diagnosis of mycobacteraemia. Cytomegalovirus (CMV) retinitis is rarely seen in African AIDS patients. This may be the result of mortality early in the disease course, or differences in race, HIV subtype, or comorbidity.

Published courtesy of:

Br J Ophthalmol 2002; **86**: 1076–1079 □

AIDS related eye disease in Burundi, Africa

Isabelle Cochereau
Najoua Mlika-Cabanne
Philippe Godinaud
Thodore Niyongabo
Bernard Poste
Athanase Ngayiragije
Marie-Christine Dazza
Pierre Aubry
Bernard Larouz

Aims: To determine the prevalence of ocular manifestations in AIDS patients hospitalised in Bujumbura, Burundi, according to their CD4+ lymphocyte count, serological status for CMV and VZV, and general health status.

Methods: Prospective study of 154 consecutive patients who underwent general and ophthalmological examinations, including dilated fundus examination. AIDS was diagnosed on the basis of Bangui criteria and HIV-1 seropositivity. CD4+ lymphocyte counts were determined by the Capcellia method. CMV and VZV antibodies were detected with ELISA methods.

Results: The mean age was 37 (SD 9) years and 65% of the patients were male. Active tuberculosis was the most frequent underlying disease (61%). Almost all the patients (99%) were seropositive for CMV and VZV. Among the 115 patients for whom CD4+ lymphocyte counts were available, 86 (75%) had more than 100 cells x10⁶/l.

Ocular involvement comprised 16 cases of microangiopathy, six of opalescence of the anterior chamber, five of retinal perivasculitis, two of zoster ophthalmicus, two of viral retinitis, and one of opalescence of the vitreous.

Conclusion: In Africa, the prevalence of ocular involvement in HIV infection is far lower than in Europe and the United States, possibly because most African patients die before ocular opportunistic infections occur.

Published courtesy of:

Br J Ophthalmol 1999; **83**: 339–342 □

Penetrating Needle Injury of the Eye Causing Cataract in Children

Peter K Rabiah MD

Purpose: To review the presentation, management, and outcome of children with cataract caused by ocular needle penetration.

Design: Retrospective, non-comparative interventional case series.

Participants: Forty-two children with cataract caused by ocular needle penetration.

Intervention: Cataract surgery.

Main outcome measures: Best-corrected post-operative visual acuity.

Results: Injuries were unintentional and occurred during unsupervised play. The type of needle involved was hypodermic in 24 cases, sewing in 7, and undetermined in 11. Endophthalmitis developed in 14 cases and retinal detachment in 6. Endophthalmitis occurred in 12 cases (50%) of hypodermic needle injury but in no case of sewing needle injury. With a mean post-operative follow-up of 2.3 years, the best-corrected visual acuity was 20/40 or better in 19 cases, 20/50 to 20/80 in 7, 20/100 to

counting fingers in 6, light perception in 1, no light perception in 6, and undetermined in 3. Eyes with endophthalmitis and/or retinal detachment had a worse visual prognosis.

Conclusions: Ocular penetration causing cataract occurred in children during unsupervised play with inadequately stored or disposed of hypodermic or sewing needles. Endophthalmitis occurred frequently in injuries caused by hypodermic needles but not in those caused by sewing needles. Visual outcome after management was good in approximately half of the cases especially if endophthalmitis or retinal detachment did not develop.

Published courtesy of:

Ophthalmology 2003; **110**: 173–176 □