

New approach needed to tackle severe ocular inflammation

**Dermot McGrath
in Monte Carlo**

THE occurrence of ocular inflammatory diseases (OIDs) and their vision-threatening complications is not being given due attention by the ophthalmology profession, according to a leading expert in the field.

Speaking at the 5th International Symposium on Ocular Pharmacology and Therapeutics (ISOPT), Arnd Heiligenhaus MD said that while most practitioners believed non-infectious OIDs and associated complications to be extremely rare, a review of the published literature shows that its incidence has in fact been significantly underestimated.

Dr Heiligenhaus marshalled a wide range of evidence in support of his contention, drawing on examples as diverse as allergy-related ocular complications, conjunctivitis, scleritis, Mooren's ulcer, Behcet's disease and uveitis to demonstrate the range and frequency of such pathologies.

Starting with the example of allergies, Dr Heiligenhaus said there was a misconception that most eye complications arising from allergies were relatively benign. He cited atopic dermatitis, a genetic skin disorder common in paediatric patients, as a case in

point.

Complications such as skin dryness and intense itching on the inside and outside of the eyelids and the inner corner of the eyes are found in 25% to 42% of patients with atopic dermatitis.

In severe cases, inflammation on the inside of the eyelids can damage the cornea leading to visual loss in 15% to 30% of such patients. Atopic keratoconjunctivitis, which is most commonly found in young patients, can also lead to substantial vision loss, noted Dr Heiligenhaus.

Severe ocular complications are also associated with rare diseases such as Stevens-Johnson syndrome, a chronic immune-complex-mediated hypersensitivity disorder caused by drugs, viral infections and malignancies.

Ocular sequelae may include corneal ulceration and anterior uveitis. Blindness may also develop secondary to severe keratitis or panophthalmitis in 3.0% to 10% of patients and some vision loss is reported in up to 30% of cases.

Ocular cicatricial pemphigoid (OCP) is another rare inflammatory syndrome involving primarily the oral and ocular mucous membranes, reported Dr Heiligenhaus.

The inflammatory lesions of the ocular surfaces may result in scarring, loss of tear film, adhesions of the lids to the eye, corneal ulcera-

tion and perforation. Vision impairment has been estimated in 20% of patients in stage three of the disease and 76% in stage-four patients. In the most relentlessly progressive or untreated cases, loss of the eye may occur.

Among the keratitis morbidities, Dr Heiligenhaus said that Mooren's ulcer and rheumatic diseases such as rheumatoid arthritis and Sjogren's syndrome could all lead to substantial visual loss and even blindness in more chronic cases.

Although necrotising and posterior scleritis are relatively rare, he said that visual loss and pain are frequently found in such patients.

The prevalence of various forms of uveitis differs clearly with race, genetic background and gender, said Dr Heiligenhaus. Uveitis, an umbrella term covering a wide range of inflammatory ocular conditions, causes symptoms based on the part of the eye involved and may include a red eye, pain, decreased vision, sensitivity to light, increased floaters, blind spots in the vision, or sometimes no symptoms at all.

The disease in all its various forms is responsible for an estimated 10% to 15% of the legal blindness in the United States, and even more in the developing world. In adults, idiopathic acute anterior uveitis is the most fre-

quent form of the disease, but the prognostic factors that are appropriate to predicting poor final outcome are not well defined.

Among patients with inflammation localised primarily to the anterior chamber, 52% or more are HLA-B27 positive, noted Dr Heiligenhaus. In addition, a number of these patients with HLA-B27-associated anterior uveitis have, or will develop, an associated systemic disorder such as ankylosing spondylitis, reactive arthritis (formerly known as Reiter's syndrome), inflammatory bowel disease, or psoriatic arthritis.

While intermediate uveitis was widely considered a less problematic disease to treat compared to the acute anterior form, there was no room for complacency.

"Intermediate uveitis has a reputation as quite a benign disease but this is not completely true. Eye complications occur in up to 50% of patients according to some studies, with cystoid macular oedema responsible for visual loss in 6% to 18% of these types of patients," he said.

Finally, Dr Heiligenhaus cited patients with Behcet's disease, of whom 95% suffered some form of associated eye disease. In chronic cases, permanent loss of vision may result from relapsing ocular inflammation and occlusion of the

retinal blood vessels.

Dr Heiligenhaus reiterated his view that the occurrence of ocular inflammatory diseases and vision-threatening complications is under-appreciated by most ophthalmologists. He said that positive measures were needed to minimise the risks to patients from OIDs.

"Differentiation of the patients is very important in helping to define subgroups at high risk of OID and drawing up effective treatment strategies that keep vision loss to an absolute minimum," he said.

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