OCULAR ROSACEA
Sight-threatening condition often missed by ophthalmologists
by Roibeard O’hEineachain in Warsaw

Ocular rosacea is an underdiagnosed and potentially blinding condition that requires a long-term treatment strategy, said Jesús Merayo Lloves MD, Oviedo, Spain, at the 17th ESCRs Winter Meeting.

Rosacea is a chronic skin disease that occurs most frequently in Caucasians between the ages of 30 and 60. In the US alone it affects 13 million people. In 80 per cent of patients there is ocular involvement. However, skin manifestations of rosacea are present in only 10 per cent of patients with ocular rosacea, Dr Merayo Lloves said.

The typical symptoms are similar to those in eyes with dry eye and include foreign body sensation, photophobia, pain, itching, redness and watering eyes. Clinical signs include erythema, telangiectasia and irregularity of lid margins, and meibomian gland dysfunction.

Ocular rosacea involves the cornea in 13 per cent of cases, and five per cent require keratoplasty procedures. Five per cent end up with a visual acuity below 20/200.

Inflammatory response The condition is a “photo-aggravated inflammatory disorder” that involves altered immune responses leading to vascular and inflammatory abnormalities. Known predisposing factors include a patient’s genetic background, infection with H pylori, infestation with D Folliculorum and seborrhoea. Ocular rosacea causes a loss of the ocular surface’s lipid layer which leads to an evaporative dry eye condition, which in turn increases the osmolality of the eye and triggers an inflammatory response. The mechanism involved in rosacea conjunctival inflammation resembles a type IV hypersensitivity reaction.

There are a range of preventive measures that patients can take to prevent ocular manifestations of rosacea. They include the avoidance of things that induce ocular inflammation or increase the risk of dry eye. Therefore, corneal surgery is contraindicated, as are contact lenses. Ocular rosacea patients should also avoid exposure to toxic environmental factors, tobacco smoke in particular. There are nutritional options, such as omega 3 fatty acids, vitamin supplementation and antioxidants that could in theory be of benefit.

Treatment includes the adoption of scrupulous lid hygiene by the patient, the use of warm compresses, lid massage, lid cleaning and lubricants. Tetracyclines also appear useful, not so much for their antibiotic effects as for their apparent immunomodulatory effects. However, there have as yet been no studies comparing the agents with placebo. For severe dry eye associated with rosacea Dr Merayo-Lloves recommends the use of haematic derivatives, particularly autologous plasma rich in growth factors (PRGF) according with the data presented in his observational study.

Breath test The treatment of associated diseases such as H pylori infection and Demodex mite infestation are essential. Diagnosis of the condition is possible by means of a urea breath test, when that test is negative, a biopsy may provide a more definitive answer. Treatment of H pylori infection in ocular rosacea patients is the same as in the treatment of cases of gastric ulcer and consists of a seven-to-10-day regimen of amoxicillin, clarithromycin and omeprazole.

Demodex infestation can be diagnosed through microscopic examination of a patient’s eye lash. Treatments for the condition include topical ivermectin eye drops. There are also formulas that can be composed at any pharmacist consisting of metronidazole and permethrin, as well as shampoos and oils containing tea tree oil.

“Ocular rosacea is an under-recognised potential blinding disease. Usually it is in relation with severe dry eye and if surgery is performed on an inflamed eye it could eventually end in a disaster. Long-term treatment and patient education about avoiding aggravation could keep the eye with no active inflammation. Research is focusing in biomarkers for correct diagnosis and trials for new treatments. At present it is underdiagnosed, despite its potential to cause blindness,” Dr Merayo-Lloves concluded.

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