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THYROID DISEASE

Potential new therapy for ophthalmopathy

A recent clinical trial has reported that teprotumumab, a monoclonal antibody that targets the insulin-like growth factor 1 receptor, is more effective than placebo at reducing ophthalmic complications in patients with thyroid-associated ophthalmopathy. The authors also reported significant improvements in patient's quality of life following treatment.

Thyroid-associated ophthalmopathy, also known as Graves ophthalmopathy, is an autoimmune disorder associated with Graves disease. The disease, which is characterized by inflammation and swelling of the extraocular muscles, primarily affects orbital and periocular soft tissues with secondary effects occurring on the eye. Frequently reported clinical features include upper eyelid retraction, oedema, erythema of periorbital tissues and conjunctivae, and proptosis.

The present phase II clinical trial involved 88 patients and comprised a screening phase (2 to 6 weeks), an intervention phase (24 weeks) and a follow-up phase (48 weeks). The primary end point of the study was a 2-point reduction in the Clinical Activity Score and a reduction of 2 mm or more in proptosis. The secondary end points, which were measured as continuous variables over time, included an assessment of the patient's quality of life.

Patients were randomly assigned to receive an infusion of teprotumumab or placebo once every three weeks. The authors reported that 69% of patients in the treatment group and 20% of patients in the placebo group had significantly reduced proptosis, improved vision and increased quality of life. 43% of patients who received teprotumumab and 4% of patients in the placebo group responded to treatment within 6 weeks.

There are currently no approved treatments to prevent the symptoms associated with Graves ophthalmopathy, but the present study represents an important step towards achieving this goal. A follow-up clinical trial is underway and has an expected completion date of March 2018.

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