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**NONSTEROID MEDICAL TREATMENT OF GRAVES
OPHTHALMOPATHY**

Abstract: Graves' ophthalmopathy (GO) is an autoimmune process involving the extraocular muscles, orbital fat and connective tissue. In the active phase of severe GO, immunosuppressive therapy is the treatment of choice, and in the inactive stage orbital surgery is more promising. Therapeutic options include both established and more experimental approaches. Glucocorticoids (GC) are the most commonly used treatment in patients with GO. Intravenous GC exert better efficacy and reduced side effects compared with the conventional oral treatment. Still, the average response rate to intravenous GC is 77% that raises the need for the additional immunosuppressive agents with favorable benefit/risk ratio in the treatment of GO. Few studies have reported that the treatment with intravenous immunoglobulins is of similar efficacy to GC, but the role of this therapy in GO is still unclear. The high cost and the risk of transmissible agents is a serious disadvantage. Cyclosporine as a monotherapy is disappointing, but in combination with oral prednisolone provides better response and lower relapses rate than GC alone. The significant side effects of cyclosporine have led to restrictive usage. Several studies have shown beneficial effects of long-acting octreotide and lanreotide in patients with active GO. Somatostatin analogues are well tolerated but costly and represent a good therapeutic alternative in patients who have experienced significant side effects to GC. Recently, a few *in vitro* studies have shown the effects of cytokine antagonists promising, but clinical trials on the use of these drugs in the treatment of GO are still lacking.

Key words: Graves' ophthalmopathy, immunosuppressive therapy