In Rheumatoid Arthritis, Rituximab therapy is an effective treatment for non-infectious refractory scleritis

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Background:

Scleritis is a serious inflammatory eye disease which is often associated with underlying rheumatoid arthritis (RA). Rituximab appears to be safe in the treatment of ocular and orbital inflammation. There have been few reports about the use of rituximab for different ocular manifestation, But, no previous reports about scleritis in RA that failed anti-TNF and responded to Rituximab

Objectives:

We report a clinical case of patient with scleritis associated with RA, refractive to conventional treatment, non-biological DMARDs and to anti-TNF treatments. The patient was treated effectively with rituximab, a monoclonal antibody (anti-B-lymphocyte antigen CD20), as a last resort in the management of noninfectious-sclerites.

Methods:

Female, 67 years old, who was diagnosed based on ACR-1987 criteria as a case of RA. She was treated with Methotrexate, Sulphasalazine and Adalimumab. RA articular symptoms and signs responded to adalimumab. Patients had no joints pain or swelling, normal inflammatory markers (ESR and CRP), and negative ultrasound power Doppler. Nevertheless, despite the positive general response to adalimumab, she developed left eye anterior scleritis. The diagnosis of non-infectious anterior scleritis confirmed by a senior ophthalmologist. The scleritis was active and persistent, despite addition of systemic corticosteroid, and increasing Adalimumab dose to weekly dosage instead of fortnightly. Hence, patient was shifted to Etanercept, which was used continuously for more than 6 months with no improvement of the scleritis, but with good articular and inflammatory markers response. Thereafter, Rituximab started.

Results:

Rituximab started and after two 1000 mg infusions, scleritis regressed and the eye was back to normal. Patient is with no sclerites for more than a year of rituximab treatment and follow up.

Left eye sclerites before
rituximab infusion

Left eye sclerites after
rituximab infusion

Conclusion:

Rituximab might be an alternative treatment for scleritis that failed conventional therapy and anti-TNF biologics. Further long-term studies are necessary to establish the safety and efficacy of Rituximab in treating non-infectious scleritis related to RA.

References:

Rituximab in the Treatment of Refractory Scleritis and Non-Infectious Orbital Inflammation: Preliminary Results From a Phase I/II Prospective, Randomized, Dose-Ranging Pilot Study [E. B. Suhler](#); [L. L. Lim](#); [S. Pasadhika](#); [S. K. Sharma](#); [P. A. Kurz](#); [T. R. Giles](#); [J. R. Smith](#); [J. T. Rosenbaum](#). Investigative Ophthalmology & Visual Science, 2008, Vol.49, 1119