OIUF THE OCULAR IMMUNOLOGY AND UVEITIS FOUNDATION

Dedicated to Eye Disease Cure and Education

Reduced Disability at Five Years with Early Treatment of Inflammatory Polyarthritis

This study determined the effect of treatment with disease-modifying antirheumatic drugs (DMARDs) and/or steroids on 5-year disability outcome in patients with inflammatory polyarthritis. Wiles and colleagues found that early initiation of systemic anti-inflammatory therapy (within 6 months of symptom onset) in patients with polyarthritis is associated with a two-fold decrease in probability of becoming disabled 5 years later when compared to later initiation of treatment (6 months or longer after symptom onset). These observations strongly emphasize the importance of early initiation of systemic anti-inflammatory therapy.

Wiles NJ, Lunt M, Barrett EM, Bukhari M, Silman AJ, Symmons DP, Dunn G. Reduced disability at five years with early treatment of inflammatory polyarthritis: results from a large observational cohort, using propensity models to adjust for disease severity. Arthritis Rheum. 2001;44(5):1033-42.

Early treatment with, and time receiving, first disease-modifying antirheumatic drug predicts long-term function in patients with inflammatory polyarthritis

In this study, Farragher and colleagues investigated the influence of early disease-modifying antirheumatic drug (DMARD) treatment on long-term functional outcome in patients with recent-onset inflammatory polyarthritis, and the impact of the duration of first and subsequent DMARD treatment. When adjusted for baseline and subsequent disease severity, those treated early (<6 months from symptom onset) experienced a non-significant improvement in function compared with those never treated (adjusted mean difference in change (adj_MDIC) in HAQ -0.24; 95% CI -0.58 to 0.09); and a significant benefit for each additional month of treatment within 6 months of the onset of symptoms (adj_MDIC -0.10; 95% CI -0.19 to -0.02). Patients who discontinued their first DMARD within 6 months experienced a significant deterioration in long-term function (adj_MDIC in HAQ 0.28; 95% CI 0.04 to 0.52), while those who continued their first treatment for > 3

years experienced an improvement (adj_MDIC in HAQ -0.37; 95% CI -0.77 to 0.04). They confirmed the importance of both the time to initiation and response to first DMARD therapy, as well as the total duration of DMARD treatment, influencing 10-year functional outcomes in patients with inflammatory polyarthritis.

Farragher TM, Lunt M, Fu B, Bunn D, Symmons DP. Early treatment with, and time receiving, first disease-modifying antirheumatic drug predicts long-term function in patients with inflammatory polyarthritis. Ann Rheum Dis. 2010;69(4):689-95.

As ocular immunologists and uveitis specialists, we observe a similar phenomenon in patients with chronic or recurrent uveitis associated with juvenile idiopathic arthritis (JIA). Children repeatedly or continuously treated with topical corticosteroids by many ophthalmologists typically suffer from slowly progressive damage to the eyesight because of cystoid macular edema, cataract, glaucoma, cyclitic and/or epiretinal membrane formation. It is not rare that the patients treated with topical corticosteroids over a long period become disabled because of loss of vision sooner or later in life. In contrast, our experience with early use of immunomodulatory therapy through a stepladder approach in JIA-associated uveitis not only prevents disability but also halts the progression of vision loss, resulting in excellent long-term visual outcomes.

The key message from the studies by Wiles and colleagues, Farragher and colleagues, as well as our own experience, is the critical importance of early initiation of systemic anti-inflammatory therapy in children with JIA-associated uveitis.

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