



THE OCULAR IMMUNOLOGY
AND UVEITIS FOUNDATION

Dedicated to Eye Disease Cure and Education

Connection Between Arthritis and Ocular Disease

C. Stephen Foster, M.D.

The eye is made up primarily of collagen, as are ligaments, tendons, and tissue within joint spaces. It is, perhaps, primarily because of this similarity in composition that the eye is often affected by many of the same diseases which affect joints. Some of these disorders include Juvenile Rheumatoid Arthritis, Adult Rheumatoid Arthritis, Systemic Lupus Erythematosus, Relapsing Polycondritis, Behcet's Disease, Wegener's Granulomatosis, Polyarteritis Nodosa, and Scleroderma or systemic sclerosis. Additionally, the type of vasculature that is present in the eye has special characteristics that produce an extraordinarily sensitive "barometer" or "sentinel canary" in the eye for potentially lethal vasculitis that can be associated with the aforementioned collagen vascular diseases. Specifically, we know from considerable experience that, despite the fact that a patient's rheumatoid arthritis may be "burned out" as far as active inflammation of the joints is concerned, nonetheless, the patient may well have subclinical rheumatoid vasculitis affecting various internal organ systems. The eye is a very potent indicator of such subclinical potentially lethal vasculitis, and if the eye becomes involved with retinal vasculitis, uveitis, scleritis, or peripheral ulcerative keratitis in such a patient, we take that as a very strong signal that the patient must be evaluated extremely carefully for potentially underlying vasculitis affecting viscera and we also take such a potentially blinding ocular lesion very seriously from the standpoint of the need for aggressive systemic immunomodulatory therapy in order to prevent permanent damage to the eye from such lesions.

For example, we have seen many instances in which patients with systemic lupus erythematosus appear, systemically, to be doing quite well (indeed, the patient's Rheumatologist has told her that she is doing very well) despite the fact that new-onset uveitis, scleritis, or retinal vasculitis has developed in one eye. We have seen this story evolve to life-threatening central nervous system vasculitis and/or lupus renal disease when the onset of the ocular inflammation was not taken as an indication for increasing the vigor of systemic therapy. We have tried diligently, therefore, over the past 15 years to raise the consciousness, not only of ophthalmologists worldwide, but also of rheumatologists and other internists of the valuable indicator that the eye can be with respect to seriousness of associated arthritic/collagen vascular disease.