Uveitis

About one in twenty patients with intraocular inflammation (uveitis) is a child. Uveitis in children differs from that in adults because of its association with juvenile idiopathic arthritis (JIA) and because of its insidious onset. The latter feature means that uveitis may often be diagnosed only at screening and ocular complications may be present already. Up to a third of children with uveitis may develop severe visual impairment.

The study included 123 consecutive patients (69 girls) who developed active uveitis at age 2–15 years (mean 8 years). One hundred and two patients (83%) had chronic uveitis and in 88 (72%) it was bilateral. Thirty six children (29%) had associated systemic disease. Twenty five of these had JIA (22 ANA positive oligoarticular JIA), and the other 11 had a variety of diagnoses: sarcoidosis (n = 3, only one with raised serum angiotensin converting enzyme concentration), chronic infantile neurological cutaneous and articular/neonatal onset multisystem inflammatory disease (CINCA/NOMID) syndrome (n = 3), tubulointerstitial nephritis and uveitis (TINU) syndrome (n = 2), psoriasis (n = 1), multiple sclerosis (n = 1), and masquerade syndrome (n = 1). Twelve children had toxoplasmosis and four herpesvirus infection. Five had specific ocular disease and in 66 cases the cause of the uveitis was not discovered.

The uveitis was anterior in 44 patients, intermediate in 30, posterior in 23, and throughout the eye (panuveitis) in 26. The uveitis of JIA was anterior (n = 18) or panuveitis (n = 7). Toxoplasmosis caused only posterior uveitis and herpesvirus only anterior. No cause was discovered for intermediate uveitis.

Ninety three patients (76%) had ocular complications including cataract (n = 43), papilloedema (n = 36), glaucoma (n = 23), and cystoid macular oedema (n = 21). Thirty five (28%) needed intraocular surgery and 57 received systemic medication including steroid (n = 39), methotrexate (n = 11), and cyclosporin (n = 4).

Three children became blind in both eyes and 20 in one eye. Eight had unilateral visual impairment (visual acuity 0.3 or less). Of the 25 patients with JIA, one developed bilateral blindness and four unilateral blindness. The most frequent causes of blindness were macular scars (most often from toxoplasma retinochoroiditis) and secondary glaucoma (most commonly with JIA).

Uveitis in childhood often becomes chronic and has a serious ocular prognosis. It may develop years after the onset of JIA and repeated ocular screening is necessary for patients with JIA.