Intermediate uveitis

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**Definition**
Intermediate uveitis – ocular inflammation concentrated in the anterior vitreous, peripheral retina and posterior ciliary body.
Pars planitis - specific subtype of intermediate uveitis characterized by snowbank or snowball formation and not associated with infection or systemic disease.

**Epidemiology**
- accounts for 10% - 15% of adult uveitis cases and 15% - 25% in patients under 16 years of age
- most common in persons under age 40; bimodal incidence pattern with peaks between ages 5-15 and 25-35

**Clinical features**
- insidious onset
- patients complain of floaters and/or blurred vision; often asymptomatic
- vitreous haemorrhage may be a presenting feature (more often in children)
- quiet anterior segment or low-grade flare and cells (spill-over anterior inflammation); no posterior synechiae in pars planitis, but may be present in intermediate uveitis with granulomatous inflammation (sarcoidosis, tuberculosis)
- “snowballs” - mobile, round, yellow-white focal opacities in the inferior peripheral vitreous
- “snowbanks” - yellowish-white pars plana exudates; typically inferior but may involve pars plana for 360°
- peripheral vasculitis
- bilateral in 70% - 90% of patients; involvement may be asymmetrical

**Complications**
- cystoid macular edema (CME)
- optic disc edema
- cataract
- epiretinal membranes
- neovascularization
- vitreous hemorrhage
- retinoschisis
- retinal detachment
- glaucoma
- band keratopathy

**Etiology**
- unknown
- immunogenic predisposition – increased frequency of HLA-DR15 (suballele of DR2), HLA-DR51, HLA-DR17

**Differential diagnosis**
• multiple sclerosis (MS)
• sarcoidosis
• Fuchs uveitis syndrome
• inflammatory bowel disease
• Behçet’s disease
• collagen-vascular disease
• infectious causes: syphilis, borreliosis, tuberculosis, cat-scratch disease, toxocariasis, toxoplasmosis, brucellosis, endogenous fungal and bacterial endophthalmitis, HIV and HTLV-1 infections
• intraocular lymphoma

Laboratory investigations
• targeted approach according to differential diagnosis
• negative uveitis work-up in pars planitis

Treatment
• if a specific cause can be identified (see differential diagnosis) – appropriate therapy

Treatment of pars planitis
• not necessary in many cases
• indication for treatment – V<0.5 (20/40); some advocate earlier treatment in CME
• perocular corticosteroid injections - depot methylprednisolone or triamcinolone acetonide
• intravitreal steroids (injections or implants)
• systemic corticosteroids
• immunosuppression
• biologicals (infliximab, adalimumab)
• interferon alfa, interferon beta
• anti-angiogenics (bevacizumab)
• laser photocoagulation
• surgical management - cryotherapy, vitrectomy

Natural course and prognosis
• benign, self-limiting 10%; smouldering with remissions and exacerbations 30%; prolonged course without exacerbations 60%
• remains active for 5 –15 years
• long-term visual prognosis good if CME adequately treated; about 75% of patients retain V>0.5