Paediatric uveitis

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bio

- MA,MB Bchir, Cambridge, UK 1983
- MRCP 1986, FRCS 1988
- Consultant ophthalmologist Ipswich Hospital 1996
- Consultant Ophthalmologist Great Ormond Street Hospital 1988
- Research Interests :epidemiology of ocular inflammatory disease; management of paediatric uveitis

Bio 2

- Member British Ophthalmological Surveillance Unit
- Member ‘multinational outcomes in paediatric uveitis group’
- International observor for American Uveitis society meeting on ‘Guidelines for paediatric uveitis’ April 2011
- Principal investigator for ophthalmology section ‘childhood arthritis prospective study’[multicentre UK]

Bio 3

- Co investigator:
- 1. canakinumab in childhood CAPS.
- 2. adalumimab in JIA-uveitis.

Size of the problem

- The incidence of uveitis is 12-24/100,000
- Paediatric uveitis is usually 5% of cases.
- Incidence of uveitis rises continuously till mid 40s

Type of paediatric uveitis

- HLA-B27 AAU is commonest in adults and v rare in children
- JIA does not occur in adults
- Sarcoid and MS and Behcet's peak in 20s to 40s
- Uveitis syndromes eg birdshot] are v rare in children

Types of paediatric uveitis

- Idiopathic
  - JIA like uveitis
  - Others
    - Intermediate uveitis
    - More benign chronic anterior uveitis
    - Multifocal choroiditis
- JIA-uveitis

Outcomes

- Mostly painless-so late presentation
- Children present with one eye already blind at a far higher frequency
- JIA is a very chronic disease
- Genetic causes lead to chronicity

Prevalence of second line immunosuppression

- Population based survey
- 15 year prevalence of IMT prescribed in all uveitis is 7/100,000
- 35% of these are children
- = 1500 children on IMT in UK in last 15 years
- 200 at GOS

Problems of extrapolating from adult uveitis

- Paucity of information about adults from trials of licensed medications
- JIA and uveitis is not the same as ERA and uveitis
- Greater severity of visual loss at presentation means different cost/benefit analysis
- Greater risk of visual loss and therefore lifelong handicap means different social cost

Treatment costs

- Steroids and growth-side effect profile is lifelong
- Oral versus injection –tolerability
- Blood monitoring-tolerability
- Topical steroid costs lead to lifelong problems with cataract and glaucoma

Longer perspective required for safety

- Parental consent to trials greatly influenced by very long-term safety
- Very long term safety more important in children and less available
- Ciclosporin and late renal failure
- Skin cancer with aza and ciclo
- Tb/malignancy with anti-TNF MoAb

Measuring children

- Acuity is mood and age dependent
- Amblyopia confounds outcomess
- Limited imaging possible
- Severe disease prevents some monitoring
- Clinical exam is mood dependent

Endpoints

- Blindness is likley to be shared between patients, parents and doctors
- But visual loss in unilateral amblyopes is of low value to patient
- Treatment costs are paramount to families for many years

Endpoints 2

- Immunosuppression must be able to reduce inflammation
- Measures of inflammation used to monitor clinical decision making are different to those which
  - Are measurable objectively
  - Have low inter-observor variability
  - Are validated to predict permanent visual loss

Areas of no consensus

- Relative value of AC cells and flare in JIA-u
- Value of cells and flare and haze and cmo as continuous variables
- Rates of remission/relapse may be simpler and more predictive of success/failure
- Clinically significant rates of relapse , or lengths of remission need to be established

Groups involved

- AUS
- Multinational group
- CAPS study
- Two trials imminent