CASE PRESENTATION

Lidia Cocho MD
08/24/12
Initial visit
07/03/08

- 34-year-old Hispanic woman
- POH: recurrent bilateral uveitis for 3 years, steroid dependent.
- Current treatment: PO Prednisone 10mg daily, PF Q2H OU
- PMH: GI ulcer, +PPD
- ROS: fatigue, painful cold fingers
Exam:

- Va OD: 20/25
  OS: 20/20

- IOP: 19 mmHg OU

- Anterior Segment: conjunctiva, cornea, lens Normal
  Trace cell AC OU

- Posterior Segment: +1 Vitreous cell OU
Differential Diagnosis

- Sarcoidosis
- Ocular TB, Lyme disease and Syphilis
- Idiopathic Multifocal Choroiditis and panuveitis

More ideas?  
Aditional testing?
Serologies:

- ANA, ANCA, C3C, C4C, CH50
- ACE, Lysozyme, CRP
- FTA-ABS, Lyme, Hep B, Hep C
- HLA B27 +
HLA B27 associated Intermediate Uveitis

Diflunisal  500mg BID

Taper PO Prednisone and PredForte
08/09/08
(1 month after initial visit)

- No pain or redness. Tolerating Diflunisal well
- Va 20/20 OU.
- IOP: 17/13
- Deep and clear AC
- Rare vitreous cells OU
04/29/09
(8 months after last visit)

- **Va**: 20/40 OD, 20/20 OS. Red painfull eyes
- **2.5+ cell AC with posterior synechia OD, 2+ cell AC OS**
- **1+ cell vitreous OU + Vitreous exudates OD**
- **History of noncompliance with Diflunisal**
06/12/09

PPV + Endolaser OD
18 Patients with recalcitrant inflammation resistant to systemic steroids

82% achieved control of inflammation at 18 months with PPV. 57% of the IMT group needed subsequent PPV.

3/3 CME resolved with PPV

Ocular Immunology & Inflammation, 18(5), 411–417, 2010
07/08/09
1 month after surgery

New flare up:

Va: 20/60 and 20/30

2 cells AC OD, 1+ OS

2+ vitreous haze OD, 0.5+ OS

CRT: 235 OD

303 OS
07/08/09

- MTX 15 mg / weekly PO
- Diflunisal 500mg BID
- Pred Forte Q2H
- TSK

Noncompliance with MTX
Multiple flare ups in the next 2 years

Compliance problem

Adverse effects of steroids

Remicade infusions

Ozurdex implant

Intraocular Study drugs
The SAVE-2 Study

Sirolimus as a Therapeutic Approach for UVEitis: A Phase 2, Open-label, Randomized Study to Assess the Safety, Tolerability, and Bioactivity of Two Doses of Intravitreal Injection of Sirolimus in Patients with Non-infectious Uveitis
Sirolimus (Rapamycin)

- A macrolide compound obtained from Streptomyces hygroscopicus isolated from a soil sample of Easter island or Rapa-Nui

- It acts inhibiting the proliferation of Lymphocytes T and B in response to cytokines
Mechanism of action of sirolimus (rapamycin)

Expert Reviews in Molecular Medicine © 2000 Cambridge University Press
The efficacy of sirolimus in the treatment of patients with refractory uveitis

V A Shanmuganathan, E M Casely, D Raj, R J Powell, A Joseph, W M Amoaku, H S Dua

- Open pilot study, 8 patients with severe non-infectious uveitis
- Median follow up: 50 weeks
- Sirolimus was effective in 5/8 patients, with control of inflammation, with dose of steroids reduced or discontinued
- 3 failures due to intolerable side effects or failure to control inflammation
Day 0:
- Va 20/30 and 20/20
- Mild pain and photophobia
- 1.5 +/- 2+ cell in AC. Vitreous haze 2+

440 µg OD
880 µg OS
Day 1:

- Big bubble floating OU
- No pain or redness
- No inflammation in AC or Vitreous
Day 7:

- Small floaters OU
- Photophobia, no pain or redness
- 1+ cells AC / 0,5 cell Vitreous OU
Day 14:

- More floaters OU
- More pain, redness, photophobia
- 2+ cell AC/ 1+ cell Vitreous OU

PF Q2H OU

Day 30:

- Va 20/32 and 20/25
- Improvement of symptoms
- Trace cell AC / Vitreous OU
HLA B27 associated Uveitis

- Intraocular inflammation in the context of positive HLA B27 Antigen
- 97% of cases are Anterior Uveitis

<table>
<thead>
<tr>
<th>Clinical Features</th>
<th>HLA-B27-Positive Anterior Uveitis</th>
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<tbody>
<tr>
<td>Age at onset (years)</td>
<td>32–35</td>
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<tr>
<td>Sex</td>
<td>Male preponderance (1.5–2.5:1)</td>
</tr>
<tr>
<td>Eye involvement</td>
<td>Unilateral in 48–59%</td>
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<tr>
<td></td>
<td>Unilateral alternating in 29–36%</td>
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<tr>
<td>Pattern of uveitis</td>
<td>Acute in 80–87%</td>
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<tr>
<td>Recurrence</td>
<td>Frequent</td>
</tr>
<tr>
<td>Keratic precipitate (KP)</td>
<td>Mutton fat KP in 0–3%</td>
</tr>
<tr>
<td>Fibrin in anterior chamber</td>
<td>25–56%</td>
</tr>
<tr>
<td>Hypopyon</td>
<td>12–15%</td>
</tr>
<tr>
<td>Associated systemic disease</td>
<td>48–84%</td>
</tr>
</tbody>
</table>
HLA B27 associated Uveitis
• Associated systemic diseases:

HLA-B27 AAU
- Ankylosing spondylitis
- Reactive arthritis/Reiter’s syndrome
- Inflammatory bowel disease
- Psoriatic arthropathy
- Undifferentiated spondyloarthropathy
Posterior segment ocular manifestations in patients with HLA-B27-associated uveitis.

Rodriguez A, Akova YA, Pedroza-Seres M, Foster CS.

- Posterior segment manifestations in 17.5% of patients
  - Severe vitritis 93%
  - Papillitis 82%
  - Cystoid Macular Edema 38%
  - Retinal Vasculitis 24%
  - Epiretinal Membrane 17%

HLA B27 associated Uveitis

- There is association to Intermediate Uveitis, Panuveitis Anterior and Posterior Scleritis

- HLA B27 + associated ocular inflammation could be more severe and resistant to conventional therapy

- They will potentially need IMT to achieve control of inflammation
HLA B27 associated Uveitis

Posterior Scleritis and Its Association with HLA B27 Haplotype
Arundhati Anshu, Soon Phaik Chee
Singapore National Eye Centre, Singapore, Singapore

*Ophthalmologica* 2007;221:275-278 (DOI: 10.1159/000101931)

HLA-B27--associated uveitis presenting with diffuse vitritis.
Castillo A, Sayagues O, Grande C, Zarco P.
Department of Ophthalmology, Hospital de Móstoles, Madrid, Spain

Thank you!!