Peabody’s Optometry Quiz Show: Rheumatologic Red Eyes Edition

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Introduction

•Richard E. Meetz OD, MS, FAAO
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  Indiana University School of Optometry
•39 years on the teaching staff
•Concurrent 22 years private practice experience

Disclosure
• No outside business conflicts to disclose
• NCCTO Examiners for NBEO

4  Rheumatologic Red Eyes

In the Rheumatologic patient, red eyes will typically present as a…
• Dry eye
• Non-infectious conjunctivitis
• Episcleritis and rare scleritis
• Anterior uveitis (or, more rarely, pars planitis, vitritis or posterior uveitis)

5  The Quiz Show

A Multiple Choice Question will be presented
• Answer by use of a “Clicker” within 30 seconds
• The % of the responders will be presented
• Correct answers and explanations will follow
• Due to limited time and the large variety of rheumatologic red eyes we are just
limiting the “Show” to: Anterior uveitis

• So… are you smarter than a 3rd year student?

6 Q: Does your clicker work?
   A. Yes
   B. No
   C. Clicker? What clicker?
   D. Butterscotch waterfalls

7 Q: Does your clicker work?
   A. Yes
   B. No
   C. Clicker? What clicker?
   D. Butterscotch waterfalls

8 Uveitis
   ◆ Definition: Inflammation of the uveal tract mostly thought to be an immune-complex disorder with a T-cell antigen dysfunction.
   • Anterior uveitis: iritis & iridocyclitis
   • Intermediate uveitis: cyclitis, pars planitis, vitritis
• Posterior uveitis: vitritis, retinitis, choroiditis, papillitis
• Panuveal: entire uveal tract

9 Classification

10 Classification
• Onset
  • Acute: 8 weeks or less
  • Chronic: longer than 3 months
• Pathological
  • Granulomatous: Large mutton-fat keratic precipitates (clumps of white blood cells)
  • Non Granulomatous: Fine keratic precipitates of lymphocytic & plasma cell infiltration

11 Classification
• Etiological
  • Exogenous uveitis
    • Associated with external injury, surgery
  • Endogenous uveitis
• Associated with systemic Dz
• Infections: TB, HZ, Lyme
• Idiopathic
  • Idiopathic specific uveitis syndromes (Fuchs, P-S)
  • Idiopathic non-specific uveitis: 25%

12 Epidemiology

Incidence
• Anterior: 12/100,000
• Posterior: 3/100,000

Prevalence
• Age: 20 to 50 yo
• Gender: Acute & Ankylosing spondylitis more common in males, chronic & sarcoid in females
• Race: Sarcoid in African Am, Behçet’s in Asians
• Geographical: Behçet’s in Japan and Mediterranean, Sarcoid in the US gulf-states

13 Prevalence

Overall 30%
• Inflammatory arthropathies  2.5%
  ◦ Rheumatoid arthritis  1.0%
  ◦ Crystal arthropathies  1.0%
  ◦ Ankylosing spondylitis  0.1%
  ◦ Psoriatic arthritis  0.1%
  ◦ Juvenile arthritis  0.06%
  ◦ SLE  0.02%

14  Uveitis & Rheumatological Disease

• Associated Systemic Dz
  ◦ Inflammatory bowel Dz
  ◦ Relapsing Polychondritis
  ◦ Sarcoidosis
  ◦ Infective: HSV, VZV, Lyme, STD, TB
• Other common causes of uveitis
  ◦ Idiopathic: 25%
  ◦ Postoperative: IOL 100%
  ◦ Traumatic: sequela 50/50 chance

15  Rheumatologic History

✓ Demographics
✓ Pattern of involvement
✓ Constitutional symptoms
✓ Eye or visual problems
✓ Skin
✓ Numbness/tingling/radiating pain, Raynauds Sx
✓ Comprehensive ROS

16 [ ] Clinical Features
• Signs: circumcorneal limbal Injection

17 [ ] Clinical Features
• Symptoms
• Photophobia, pain, redness, decrease vision & tearing
• Chronic: HA, slight light sensitivity, slight blur

• Signs
  • Injection: circumcorneal limbal “ciliary flush”
  • Keratic precipitates (KP)
    • Fine infiltrates
    • Medium to large “mutton fat”
  • Hypopyon
  • Pigmented
  • Aqueous cells & flare
  • Iris: TID, nodules & Posterior synechiae

Q: What is the most common and reliable 1st sign of an anterior uveitis?

A. 3+ conjunctival circumcorneal limbal injection
B. Anisocoria, miotic & irregular pupils
C. Keratic precipitates (KPs)
D. Positive consensual photophobia
E. VAs Reduced 1 to 3 lines, NIPH

19 Answer: “D”
Positive consensual photophobia test

20 Answer: “D”
The most common and reliable 1st sign of a anterior uveitis is the Positive consensual photophobia test.
  • Most common 1st Sign
  • Most reliable sign…. Will detect 90% of cases before AC signs present.

21 Clinical Features
• Signs: Acute “ciliary flush”

22 Clinical Features
Biomicroscopy: Injection
  Degree & location of conjunctival injection:
  (a) Degree: greater (>2+) for acute &
severe,  
but often only trace in chronic uveitis  
(b) Perilimbal with iritis & iridocyclitis  
(c) Fornical injection (Bluish) with ciliary body inflammation  
(d) No injection in posterior uveitis

23 Q: Cells and Proteins will circulate in the anterior chamber and deposit on the posterior cornea as keratic precipitates (KPs). What is the typical pattern that KPs will deposit in?  
A. Arlt’s triangle  
B. Diffuse endothelial spread  
C. Krukenberg’s Spindle  
D. Punctate Epithelial Keratitis

24 Answer: “A”  
Biomicroscopy: DDx of KPs  
• Type: Fine infiltrates vs Medium to large “mutton fat”  
• Position: Arlt’s triangle; inferior corneal endothelium with the base
down

- Number: Number of KPs indication of length of involvement & serve as a measure of recovery
- Beware of the “sentinel infiltrate”, a remaining single middle to small KP that warns of a smoldering case
- Color: white, waxy, hazy ground-glass, pigmented

25 Ocular Exam

Biomicroscopy: KP’s
Mutton Fat in Arlt’s triangle

26 Ocular Exam

Biomicroscopy: “ghost and pigmented KP’s”
Long standing non-granulomatous KPs may become less dense “ghosts” or become pigmented.

27 Ocular Exam

Biomicroscopy: KP’s
Fine sentinel infiltrates
Q: You observe the Anterior Chamber and detect cells and flare, which of the following would be the most severe case?

A. 1+ Flare & #5 circulating cells
B. 2+ flare & #25 circulating cells
C. 2+ flare & #50 circulating cells
D. 3+ flare & #25 stationary cells

Answer “D”

Biomicroscopy: Anterior chamber
(a) Cells and Flare
1. WBC released from the iris vessels will circulate in the AC
2. Protein released from the iris vessels will make the AC hazy or smoky in appearance (compare one side to the other)
3. Increasing haze and increasing #s with increase Rxn
(b) If AC Reaction is severe, may
observe a build up of WBC at the bottom of the AC: Hypopyon
(c) If the cells are not seen to be moving look closely for fibrin. Fibrin can congeal to form sheets in very severe iritis called: “Plasmoid Aqueous” IOPs will be elevated!

30 Ocular Exam
Biomicroscopy: cells

31 Ocular Exam
Biomicroscopy: flare

32 Ocular Exam
Biomicroscopy: Grading cells & flare

<table>
<thead>
<tr>
<th>Cells</th>
<th>Flare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trace</td>
<td>faint</td>
</tr>
<tr>
<td>1-5 cells</td>
<td>Trace</td>
</tr>
<tr>
<td>1+</td>
<td>6-15</td>
</tr>
</tbody>
</table>
& lens Clear)
2+  16-25       2+  Marked
(iris & lens Hazy)
3+  26-60       3+  Intense
(fibrin & plasmoid
4+  60+       4+  Marked
  aqueous)*

NOTE movement!
* NO movement of cells observed =
  Plasmoid aqueous

33  Ocular Exam
    Biomicroscopy: Hypopyon

34  Ocular Exam
    Biomicroscopy: Plasmoid aqueous

35  Ocular Exam
    Biomicroscopy:
    Iris inspected for:
(a) iris nodules at pupillary margin (Koepppe); HSV
(b) iris nodules along sector (Busacca): VZV
(c) irregularly shaped/posterior synechiae;

Does the pupil move freely?

36 Ocular Exam

Biomicroscopy:
Posterior synechiae

37 Ocular Exam

Biomicroscopy:
(a) iris Koepppe nodules

38 Ocular Exam

Biomicroscopy:
(b) iris Busacca nodules

39 Ocular Exam

Ocular Tensions (IOPs) **Always done!**
(a) Expect 4-5 mmHg lower than fellow eye
(b) However, in inflammatory systemic Dz, IOPs can be elevated 10 to 50mmHg over baseline
   - In a plasmoid aqueous expect >30mmHg
   - In Fuchs expect IOPs of 40 to 50s
   - In P-S expect IOPs of 60 to 70s

40 Lab Tests in Rheumatic Disease

• Major Categories:
  ◦ Acute phase reactants (ESR and CRP)
  ◦ Autoantibodies (ANA, DNA, RF, Ro, etc.) and related studies
  ◦ Uric acid
  ◦ Haplotyping(HLA)

41 Lab Tests in Rheumatic Disease

Initial Screening Labs:
* Comprehensive metabolic Panel
  * including Uric Acid & CPK
* CBC
* WESR, CRP
42 Lab Tests in Rheumatic Disease

Positive HLA-B27

- Means a higher likelihood of underlying inflammatory cause.
- 50% chance of a uveitis if HLA-B27+
- Treatment must be more aggressive and longer
  - Cycloplegic
  - Corticosteroids
  - AC must be clear before taper!

43 Lab Tests in Rheumatic Disease

HLA Haplotype Types:
- HLA-B27: 50-60% of all Ant Uveitis
  - associated with AS 88-90%
  - associated with Reiter’s 85-95%
  - associated with Inflammatory bowel Dz 60%
  - associated with psoriatic arthritis (PsA)
50%

• 10% of normal population!

**Lab Tests in Rheumatic Disease**

Other HLA Haplotype Type Associations:
- HLA-B5: Behçet’s Syndrome
  - Subtypes Bw51 & B52
- HLA-B7: also AS
- HLA-B8: Sjögren’s syndrome
- HLA-B12: Behçet’s Syndrome
- HLA-B17: also associated with PsA
- HLA-Bw54: Posner-Schlossman Syndrome

Q: Your 40 yr old male patient shows signs of synechiae in both eyes. Besides a history of red, light sensitive eyes he reports having back problems. Is it Ankylosing Spondylitis (AS)? Which of the following would be the definitive test?
A. Positive ANA  
B. Positive Flesche Test  
C. Positive HLA-B27  
D. Positive SI joint (lumbar) x-ray

46  Anterior Uveitis:  
Rheumatologic causes & Clinical Features

Ankylosing Spondylitis (AS)  
Prevalence  
- 0.1% in gen Pop, 2% of Caucasian males  
- Males 5:1  
- Onset teens to 35yo, mid 20 most common  
- Pos family Hx: 20% 1° relation

Clinical Presentation:  
- Low back pain & morning stiffness X 3 mos  
- Sx > 1hr  
- Wt loss, mild malaise
• Uveitis slow to resolve (2-3mos)

**Answer: “D”**

**Rheumatologic causes & Clinical Features**

Ankylosing Spondylitis (AS)

Ocular findings

Monocular Uveitis (alternates), non-granulomatous (fine), posterior synechiae common, plasmoid aqueous not uncommon

• uveitis will often be 1st sign, (in 25% of cases)

Clinical work-up: Schober Test
(Lumbar flex), Patrick’s or Faber test (hip rotation), Flesche Test (occiput-wall distance)

Laboratory work-up: +HLA-B27(90%),
+ ESR & CRP, -ANA, -RF,

**Definitive Dx by +SI-joint XR ( ODs ck Flesche 1st)
Treatment: Std to full strength AC Tx 6-8 wks, plus NSAID
Indomethacin PO 75 mg SR qd or 25 mg tid

• Rare macula edema if not Tx correctly

48 Anterior Uveitis:
Rheumatologic causes & Clinical Features

Ankylosing Spondylitis (AS)
• Resolving plasmoid aqueous

49 Anterior Uveitis:
Rheumatologic causes & Clinical Features

Ankylosing Spondylitis
• Erosion of SI joints early in Dz, fusing later

• early later
50  Ankylosing Spondylitis

Neck deformity

51  Anterior Uveitis:
Rheumatologic causes & Clinical Features

What is a Flesche Test?
- AKA: Occiput to Wall Distance
  - Measure of cervical flexion deformity
  - Patient stands heel and buttocks to wall
  - Inst to touch back of head to the wall
  - Any gap is positive test

52  Anterior Uveitis:
Rheumatologic causes & Clinical Features

Lateral Spinal Flexion Test
• Measure of Lumbar flexion
• Patient stands heel and buttocks to wall
• Inst: …slide your hand down your leg as you tip to your side
• Hand should be >10 cm lower

53 **Q Case**

22 yo female “red watery left eye” x 4 days
ROS: + silver scaled skin rash over her ankles and elbows that has waxed and waned.
SLEEx: Conjunctival and perilimbal injection OS
Cornea: OD clear
OS non-granul KPs, 1+ cells & AC flare
Working diagnosis = uveitis… maybe secondary to Psoriatic arthritis? What
other finding would strongly support your suspicion?

54 Q: 22 yo with AC Rxn and rash, Working Dx...Maybe secondary to Psoriasis? What other finding would strongly support your Working Dx?
   A. Enlarging silver rash
   B. Lower back stiffness
   C. Malar rash
   D. Nail pitting
   E. Positive HLA-B27

55 Anterior Uveitis: Ans “D”
Rheumatologic causes & Clinical Features

Psoriatic Arthritis(PsA)
• Clinical signs & symptoms: 1% of population, males = females, peak onset 30-50 yo, silver scaling rash on extensor surfaces, hands (DIP swelling) & nail Dz (pitting) common.
• Ocular findings: General ocular inflammation 30%, conjunctivitis 20% (mucopurulent), non-granulomatous uveitis 16%. With Nail Dz 80% will experience uveitis.
• Clinical & laboratory work-up: anemic CBC, Pos ESR, Neg RF.
• Treatment: Std AC Tx, cold compresses, lubricants & vasoconstrictors, NSAID
  • Will need to Tx AC until clear before taper

56 Anterior Uveitis: Rheumatologic causes & Clinical Features

Psoriatic Arthritis(PsA) Nail Dz “Pitting” & Onycholysis

57 Q Case

24 yo female watery bilateral conjunctivitis
Hx: just getting back from Mexico
where she got food poisoning and a fever. She also reports her knees ache
Clinical Exam: conjunctivitis OU
   OD low grade uveitis with fine KP’s

You are wondering could it be Reiter’s? She denied any sexual activity, so what Sx could you ask her about that would most strongly support your suspicion?

58 Q: What Sx could you ask her that would most strongly support your suspicion?
   A. Burning with urination
   B. Days of diarrhea (>3)
   C. Genital ulcers
   D. Palmar rash

59 Anterior Uveitis: Rheumatologic causes & Clinical Features
Reiter’s syndrome
• Prevalence = 4/100,000
• Males 9:1

Clinical presentation
• Uveitis post STD 50% & post dysentery 75%
• Typically within 2-4wks
• 1st symptom: Most commonly - non-infectious conjunctivitis (66%)
• Other systemic symptoms include:
  • Joint pain (2-4 joints)& stiffness 50-70%
  • Mouth & genital ulcers 25%

• Only 1/3 show classic triad
  • Triad: arthritis, nongonococcal urethritis & conjunctivitis
  • Most show only two Sx

60 Anterior Uveitis:
Rheumatologic causes & Clinical Features

Reiter’s syndrome: non-infectious conjunctivitis

Anterior Uveitis: Rheumatologic causes & Clinical Features

Reiter’s syndrome

• Ocular findings: conjunctivitis 50%, discharge little to none, monocular non-granulomatous uveitis 16-40%, uveitis 1st symptom 10%, posterior synechiae, rare hypopyon, rare 2° glaucoma

• Clinical & laboratory work-up: anemic CBC, Pos ESR & CRP, - ANA, -RF, Pos HLA-B27 (80%), Pos SI-joint XR findings
• Treatment: Standard to full strength AC treatment 2-6 wks, NSAID (Indomethacin std), PO corticosteroids, PO tetracycline or erythromycin

62 Anterior Uveitis: Rheumatologic causes & Clinical Features

“Incomplete Reiter’s syndrome”
• 2/3 patients who do not show the triad
  ◦ Due to non simultaneous symptoms or underreporting of either the ocular or GU findings
  ◦ RS affects females less than males, less likely to report
  ◦ Most common
  • joint pain (67%)
  • conjunctivitis (41%)
  • oral ulcers (25%)

63 Q Case
40 yo W female presents with recurrent uveitis that she has put off coming in for. When you ask why…She reports just not feeling well, SOB with a chronic cough and her knees have been painful. You suspect that all the Sx are connected…what syndrome are you thinking it could be?
(a) Ankylosing Spondylitis
(b) Gouty Arthritis
(c) Pulmonary Sarcoidosis
(d) Rheumatoid Arthritis
(e) Systemic Lupus
B. Gouty Arthritis
C. Pulmonary Sarcoidosis
D. Systemic Lupus

**Anterior Uveitis: “C”**

**Rheumatologic causes & Clinical Features**

**Sarcoidosis**

**Prevalence:**
- 5/100,000 Caucasians to 40/100,000 in Blacks
- females slightly higher, peak onset 20-40 years old

**Clinical Presentation:**
- pulmonary lymphadenopathy 90%
- erythema nodosum legs & arms
- Lupus pernio (purple lupus)
- CNS lesions 5%
- CN palsies (7th most common)
Rheumatologic causes & Clinical Features

Sarcoidosis

Systemic Signs & Symptoms:
malaise, wt loss, low grade fever, fatigue, cough, dyspnea, wheezing, chest pain, acute joint involvement of the knees & ankles most commonly, hands (PIP), wrists and elbows 2wks-several mos.

Watch for Uveoparotid fever:
• Fever
• Uveitis
• Parotid swelling.

Anterior Uveitis: Rheumatologic causes & Clinical Features
Anterior Uveitis: Rheumatologic causes & Clinical Features

Sarcoidosis
Ocular findings: 30%, sicca, conjunctival nodules, uveitis 25% (acute iridocyclitis in young patients, granulomatous iridocyclitis in older), posterior synechiae, 2° glaucoma. Can have extensive posterior segment involvement

Clinical & laboratory work-up: Positive chest XR, CBC (anemic), positive ESR & CRP, positive serum ACE (90%), positive serum calcium, proteinuria on urinalysis.

Treatment: Anterior segment: Std AC Tx, PO corticosteroids, sub-Tenon injection PRN, lubricant drops & ung PRN
Anterior Uveitis: Rheumatologic causes & Clinical Features

Sarcoidosis

Anterior Uveitis: Rheumatologic causes & Clinical Features

Sarcoidosis ocular nodules

Q: You are examining a young Boy Scout, who after his last camping trip in Michigan has a flu Sx for the last 3 weeks and complained of a fever, a ring like skin rash and red puffy eyes. You find periorbital edema, follicular conjunctivitis, episcleritis, and granulomatous uveitis. Which of the following causative agents would you most suspect?

A. Fuchs’
B. Herpetic
C. Lyme
D. Rheumatic Fever

72 Anterior Uveitis: “A”
Chronic Systemic Infective causes & Clinical Features

Bull’s Eye Rash

Dear Tick

73 Anterior Uveitis:
Chronic Systemic Infective causes & Clinical Features

Lyme Disease
Clinical signs & symptoms: Uveitis rare, S&S photophobia, “flu like symptoms, erythema migrans “bulls eye” lesion
Ocular findings: Early phase; periorbital edema, follicular conjunctivitis, episcleritis, late phase:
granulomatous uveitis, posterior synechiae
Clinical & laboratory work-up: ELISA, IFA IgG/IgM, Western Blot
Treatment: Std AC tx, PO Doxycycline

Q: You are seeing a 34 yo male for a unilateral recurrent, mild to severe uveitis. You note 2+ cells and flair with small KPs, focal iris hyperemia, atrophy and for the 1st time iris nodules?? Today he has elevated IOPs & corneal haziness. What is the most likely source of these findings?
A. Fuchs’
B. Herpetic
C. Lyme
D. Syphilis

Anterior Uveitis: “B”
Chronic Systemic Infective causes & Clinical Features

Herpes Simplex(HSV)/ Herpes
Zoster (VZV)

a. Clinical signs & symptoms: up to 40% in VZV, photophobia, pain, blurred vision, Hx of HSV or VZV

b. Ocular findings: depressed corneal sensation, unilateral recurrent, mild to severe AC rxn with small KPs, focal iris hyperemia & atrophy, inflammatory episodes with elevated IOPs & corneal haziness

c. Clinical & laboratory work-up: aqueous ELISA?

d. Treatment: Std AC tx with very gradual taper, PO acyclovir, glaucoma Tx PRN

Anterior Uveitis: 
Chronic Systemic Infective causes & Clinical Features
Herpes Simplex(HSV)/ Herpes Zoster(VZV)

**Anterior Uveitis:**
Chronic Systemic Infective causes & Clinical Features

Biomicroscopy:
Iris inspected for:
(a) iris nodules at papillary margin (Koeppe); HSV
(b) iris nodules along sector (Busacca): VZV
(c) irregularly shaped/posterior synechiae;

Does the pupil move freely?

**Anterior Uveitis:**
Chronic Systemic Infective causes & Clinical Features

Biomicroscopy:
(a) iris Koeppe nodules (HSV)
Clinical Features
Biomicroscopy:
(b) iris Busacca nodules (VZV)

Q Case
A 54 yo W female presents with a severe HA and photophobia. She said she gets these migraines two or three times a year but this time her vision is burred. VA are 20/40 OD and 20/25 OS. You observe a slightly steamy cornea some diffuse fine KP’s, 2+ cells and trace to 1+ flair. You have a Dx: Uveitis NOT migraine.

You would like to spare this patient any further discomfort but which of the following test had you better not skip?

You would like to spare this patient any further discomfort but which of the following tests had you better not skip?
A. BIO
Anterior Uveitis: Idiopathic Specific Syndromes

Fuchs’ Heterochromic Iridocyclitis (FHI)

a) Clinical signs & symptoms:
   • 5% of uveitis, slightly more common in males?
   • young adults with heterochromia,
   • rarely symptomatic,
   • gradual blurring of vision, most common
   • increased cataract formation

b. Ocular findings:
• Unilateral (90%) non-granulomatous iridocyclitis with diffuse, white stellate KPs,
• fine neo vasculiaztion of the angle
• mild AC rxn, 1-2+ cells trace flare,
• iris stromal atrophy (transillumination), iris nodules (both types), - posterior synechiae, hypochromic affected eye (90%),
• 2° glaucoma 59% & cataract,
  • IOP often 40’s mmHg
  • + cells in anterior vitreous.

Anterior Uveitis: 
Idiopathic Specific Syndromes

Fuchs’ Heterochromic Iridocyclitis (FHI)

c. Clinical & laboratory work-up: none
d. Treatment: topical corticosteroids often ineffective, poor response to glaucoma medications 40-70%, 60%
Anterior Uveitis: Idiopathic Specific Syndromes

Fuchs’ Heterochromic Iridocyclitis (FHI)

Anterior Uveitis: Idiopathic Specific Syndromes

Glaucomatoocyclitic Crisis (Posner-Schlossman Syndrome)

a. Clinical signs & symptoms: Rare, Onset 20-30 yo, remission by age 50s, slightly more common in females(?), blurred vision, pain, photophobia, Hx of recurrent HSV infection.
b. Ocular findings: Acute unilateral(90%) non-granulomatous iridocyclitis, marked IOPs elevation 50-70mmhg, marked ciliary flush, small white KPs, mod AC rxn 2+ cells 1+ flair.
c. Clinical & laboratory work-up: R/O AS, +HLA-B54
d. Treatment: Std AC tx with prolong taper, glaucoma medications PRN, prostaglandins contraindicated

87  Anterior Uveitis:  
Idiopathic Specific Syndromes

Glaucmatocyclitic Crisis (Posner-Schlossman Syndrome)

88  Anterior Uveitis:  
Idiopathic Specific Syndromes

Glaucmatocyclitic Crisis (Posner-Schlossman Syndrome)

89  Diagnostic approach by pattern of presentation

90  References
  • Bickley, L “Bates’ Guide to Physical Examination and History Taking”, 11th
Diagnostic approach by pattern of Anterior Uveitis:

Q: You observe the Anterior Chamber

A. unilaterally recurrent, mild to severe

Rheumatologic causes & Clinical Features

A. What are the most common causes of anterior uveitis?

B. Most show only two

C. What are the most common causes of anterior uveitis?

D. Maybe secondary to

E. Most show only two

F. Which of the following causative agents are most common?

G. Rheumatologic causes & Clinical Features

H. Most show only two

I. Anterior uveitis: “C” have been painful. You suspect that all

J. Rheumatologic causes & Clinical Features

K. Maybe secondary to

L. Maybe secondary to

M. Maybe secondary to

Ocular Exam

Q: Does your clicker work?

Peabody’s

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