A Tailored Approach to Uveitis and Associated Systemic Conditions  
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I. Introduction
   A. Why I am giving this talk
   B. What to take from lecture
      1. Better understanding of Uveitis
      2. What to look for during the examination
      3. Learn about common associated conditions
      4. Learn when and how to use specialized testing for associated conditions

II. Diagnosis
   A. How inflammation works
      1. Pain
      2. Redness
      3. Swelling
      4. White Blood Cell Migration
   B. Common denominator in all uveitis: White blood cells

III. The Goal of Treatment
   A. Improve patient’s quality of life

IV. Associated Conditions
   A. What is the purpose of evaluating for associated conditions?
      1. Find something that once found will help alleviate uveitis and prevent recurrence.
      2. Correctly name a condition that was previously named incorrectly – leading to better treatment of non-ophthalmic condition
      3. Should leave the patient better after the testing
   B. We need a thoughtful approach that matches the description of uveitis with patient’s symptoms.
   C. A “scatter” approach is not good medical care because:
      1. It is no more beneficial to patient than tailored approach
      2. There is added expense
      3. There is added anxiety
      4. Increase in false positives

V. A tailored workup should be specific to your patient. It requires that you know:
   A. A working list of common associated conditions
   B. The characteristics of the uveitis of those conditions
1. Acute vs. Chronic – Can be acute and recur. Recurrent does not mean Chronic
2. Anterior vs. Posterior (or Panuveitis)
3. Unilateral vs. Bilateral (or Alternating)
4. Granulomatous vs. Non-Granulomatous – Often difficult to distinguish. Look for Granulomas, Bussaca nodules or Mutton Fat KP

C. The history and physical findings that might manifest in a patient with one of these conditions

D. What specialized testing used to identify these conditions (if indicated)

E. The appropriate referral/treatment when a condition is diagnosed or suspected

F. Meshing these five areas will allow for appropriate testing and eliminate unnecessary tests. (e.g. a patient with acute, unilateral, non-granulomatous uveitis should not be tested for Sarcoid.)

VI. Common associated conditions and their characteristics

A. Ankylosing Spondylitis, Reactive Arthritis - Acute, anterior, unilateral, nongranulomatous.

B. Inflammatory Bowel Diseases– Typically unilateral and non-granulomatous. However, some report up to 50% bilateral. Forty percent of uveitis is anterior (40% is panuveitis, 20% posterior)

C. Juvenile Rheumatoid Arthritis– Chronic, anterior, unilateral or bilateral, nongranulomatous, asymptomatic. “White eye uveitis.”

D. Sarcoid, Tuberculosis – Chronic, anterior (can be posterior or pan), bilateral, granulomatous

E. Syphilis – ”The Great Imitator”

F. Lyme – Variable, Nonspecific

G. Multiple Sclerosis – Chronic, bilateral, anterior or intermediate, nongranulomatous.

H. Herpes Simplex – Acute, unilateral, anterior, nongranulomatous.

I. Herpes Zoster - Acute, unilateral, anterior, nongranulomatous.


VII. Signs/Symptoms, Follow-up Testing, and Treatment of Associated Conditions

A. Ankylosing Spondylitis
   1. Lower back pain/stiffness in morning > 30 minutes, back pain improves with exercise, awakening in second half of night from back pain. All back pain is worse with rest.
   2. Sacro-iliac joint x-ray and referral
   3. Treatment typically NSAID. TNF Blockers work very well but are very expensive

B. Reactive Arthritis
   1. Most patients with Reactive Arthritis lack the full triad of “Reiter’s Syndrome.” Acute, asymmetric oligoarthritis (typically knee, ankle, foot). Can also have symptoms of urethritis, diarrhea, or cutaneous
lesions (usually soles of hands or palms of hands). Musculoskeletal symptoms follow GI or GU symptoms by 2-4 weeks.

2. Refer to Rheumatology. Laboratory tests are not indicated for diagnosis.

3. Treatment is pain management. This includes, but not limited to, Physical Therapy, NSAID, Steroid, Anti-rheumatic medication.

C. Inflammatory Bowel Disease

1. GI symptoms such as stomach cramps, diarrhea, bloody stools

2. Refer to GI

3. Treatment has a multi-step approach: Fiber, Aminosalicylates, and Corticosteroids

D. Juvenile Rheumatoid Arthritis


2. Possible joint pain/stiffness

3. Refer to pediatrician

4. Treatment typically NSAID.

E. Tuberculosis

1. Very Rare except in urban, multi-ethnic areas (i.e. New York City). Exposure to TB, chronic cough, pulmonary distress

2. Order chest x-ray. PPD is not a sensitive test. Most do not recommend it.

3. Refer to infectious disease

4. Treatments include: Rifampin, Ethambutol, Corticosteroids

F. Sarcoid

1. Skin involvement (Macules, Papules, Granulomas), pulmonary symptoms such as dyspnea or cough

2. Order chest x-ray. Refer. ACE is a non-specific test with a poor sensitivity.


G. Syphilis

1. Exposure, previous history or treatment, skin rash, or chancre

2. VDRL (or RPR) and FTA-ABS (or MHA-TP)

3. Most literature suggests that Syphilis affects posterior segment. The bulk of syphilitic uveitis is in immune compromised patients such as HIV/AIDS.

4. If Syphilis is suspected, should see infectious disease.

H. Lyme

1. Very rare.

2. Mostly in Western, Upper Midwest, and Northeast states.

3. Need to have very high suspicion. Usually history of rash, flu-like symptoms. Uveitis appears during early stages of disease.
I. Multiple Sclerosis –
   1. Some reports indicate up to 25% of MS patients get uveitis.
   2. Will likely already have a diagnosis of MS.

J. Herpes Simplex
   1. Associated with moderate IOP increase and stromal edema.

K. Herpes Zoster
   1. Associated with current or recent unilateral (same side as uveitis) facial lesions

L. Fuch’s Iridocyclitis - No systemic findings
References