CME for Family Medicine Specialists

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Disclosures

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Clinical Pearls

• Objectives:
• Share some practical observations/insights
• History
• Physical Examination
• Labs
HEADACHE
• 80 yo woman with known RA
• Develops unilateral ear ache
• Wakes her at night
• Exam-normal Tympanic Membrane
• RA well controlled-damaged joints but none swollen
• ESR 20 mm/hr
Key Questions in the History

• Scalp Tender? Hurt to comb her hair or touch scalp
• Jaw ache with chewing?
• Visual disturbance?
If YES

• To any one of the preceding questions...

• Think Temporal arteritis
BUT ESR is only 20 mm/hr!
Simple rule for normal ESR

Men: age ÷ 2 = normal ESR

Women: (age + 10) ÷ 2 = normal ESR

This Patient

- 80 yrs old so normal ESR is any value ≤ 45

Her value is 20 mm/hr

She is sent to her dentist who recommends bite plate
A few weeks later she loses sight in eye same side as ear

Dx: GCA/Temporal Arteritis
Re Patients with Temporal Arteritis, which statements are true?

a) Risk blindness even after steroids are started
b) If blindness has already occurred bilaterally, there is no need for steroids
c) Are at increased risk for dissecting thoracic aneurysm
d) All of the above
e) a + c
Timing of Biopsy

• Retrospective\textsuperscript{1} and Prospective\textsuperscript{2,3} trials:

• Timing of biopsy relative to steroid initiation does not affect biopsy results

Quick facts

• Risk of blindness highest in first 6 weeks of symptom onset, even with Rx
• Systemic disease-needs treatment even if blindness has occurred
• Risk of thoracic aneurysms increases with time (Arthritis Rheum. 2003 Dec;48(12):3522-31)
Labs that can fool you

ESR
ESR

• The rate at which erythrocytes fall through a column of plasma

• Indirect measurement of plasma acute phase protein concentrations - Fibrinogen

• Advantage: familiar, simple, abundant literature, inexpensive
## Factors that Influence ESR

<table>
<thead>
<tr>
<th>Increase</th>
<th>Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anemia</td>
<td>Sickle cell anemia</td>
</tr>
<tr>
<td>Hypercholesterolemia</td>
<td>Microcytosis</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>Polycythemia</td>
</tr>
<tr>
<td>Inflammatory diseases</td>
<td>Hypofibrinogenenemia</td>
</tr>
<tr>
<td>Increase Igs</td>
<td>CHF</td>
</tr>
<tr>
<td>Increase fibrinogen</td>
<td>Cachexia</td>
</tr>
<tr>
<td>CRF</td>
<td>Low room temp.</td>
</tr>
<tr>
<td>Heparin</td>
<td>Clotting of the blood samples</td>
</tr>
<tr>
<td>Tissue damage (MI, stroke)</td>
<td></td>
</tr>
<tr>
<td>High room temp.</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
- CRF: Chronic Renal Failure
- MI: Myocardial Infarction

Clotting of the blood samples
ESR DISADVANTAGES

• increases with age
• changes relatively slowly
• influenced by RBC characteristics & immunoglobulins
Summary

• Be suspicious of temporal arteritis in elderly population with new symptoms in head and neck region

• ESR may be normal in up to 10% patients with GCA (and is affected by many things)

• Biopsy is valuable even weeks after steroids initiated
Gout

Elderly women and young men

Different joint distribution

Different cause
Gout

Gout is rare in men < 35 yrs
If present, think genetic deficiency
(family members will nearly always
history of gout at young age)
Due to excess production of uric
acid
Gout in Elderly Women

- Sudden onset
- Usually DIP joints of Hands!
- Can mimic septic arthritis
- Are nearly always on thiazide diuretic
- Due to decreased excretion of uric acid
History

“Everything is getting harder to do”
Difficulties

• Climbing stairs
• Getting up from chairs, toilet seat
• Limbs feel “heavy”
She does not complain
Of Weakness
My observation

• The patient who complains of weakness is usually not weak, but is expressing symptoms of fatigue, low blood pressure, malaise due to a multitude of causes

• The patient who complains of what difficulties DOING, is much more likely to have a muscular or neuromuscular cause for their symptoms
• Test her strength-proximal and distal
• Check reflexes
• Check ALT and CK
Pregnant woman

- Previously well
- Complaints of any symptom that could be due to an “itis”-e.g.
  - Joint pain arthritis
  - Chest pain pleuritis
  - Swollen feet nephritis
Think SLE

• 30% of all lupus patients have their **first** symptoms in pregnancy
• Initial symptoms can be mild to life threatening
• 25% pregnant lupus pts have thrombocytopenia

Labs that can fool you

• Rheumatoid Factor

• Titer > 1000?

• Almost assuredly NOT from RA
Rheumatoid factor in rheumatic disease

- Rheumatoid arthritis – 60-70%
- Sjogren’s syndrome – 75-95%
- Mixed connective tissue disease – 50-60%
- Mixed cryoglobulinemia – 40-100%
- SLE – 15-35%
- Polymyositis/dermatomyositis – 5-10%
Rheumatoid Factor in non rheumatic diseases

Aging (>age 60)

Infection
- Bacterial endocarditis
- HBV or HCV
- Viral infection
- TB
- Syphilis
- Parasitic disease

Pulmonary diseases
- Sarcoidosis
- Asbestosis
- Interstitial pulmonary fibrosis
- Silicosis

Primary biliary cirrhosis

Malignancy
Bedside Exam Pearl

- Straight Leg Raise

- Radicular pain made worse with SLR

- If NOT relieved by knee flexion
• Look for cause of pain in the buttock
+ve SIGN OF THE BUTTOCK

Could be due to:

- Bursitis
- Tumor
- Abscess
Sign of the Buttock

• Kesson M, Atkins E, Orthopedic Medicine, A Practical Approach. 2nd edition. Elsevier: 2005
• http://www.cyriax.eu/content/sign-buttock
Clinical Pearl

• New ache or pain in head or neck in elderly patient should prompt you to think about GCA

• Do not let normal ESR fool you

• Up to 10% patients may have normal ESR
• Complaint of Weakness is usually not because of muscular weakness
• Complaints of what patients cannot do, often due to true weakness
• Gout in elderly women is not like gout in men
• “itis” in pregnancy-think lupus
• Sign of the Buttock-red flag