Optimizing care of rheumatology patients in the primary care setting

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Disclosures

• I am a secret procrastinator
Off Label

- I am going to discuss potential off-label use of vaccines
Learning Objectives

At the end of this talk, participants will have increased skill and confidence:

- managing hormonal therapies in post-menopausal women with autoimmune disease
- managing immunosuppression perioperatively
- managing steroids perioperatively
- managing infections in patients on immunosuppression
- managing immunosuppression in patients with infections
- vaccinating patients with autoimmune disease
Learning Objectives

• Manage hormonal therapies in post-menopausal women with autoimmune disease
• Manage immunosuppression perioperatively
• Manage steroids perioperatively
• Manage infections in patients on immunosuppression
• Manage immunosuppression in patients with infections
• Vaccinate patients with autoimmune disease
53yo African American woman, with SLE in remission, with hot flashes

- Dx age 22 (late ’80s)
- 2010 – lost insurance, stopped meds
- 2012 – admit DH
- nephrotic range proteinuria, renal biopsy showed class V disease (membranous nephropathy), rash, hypocomplementemia
- Treated with AZA, steroids, HCQ
- In remission/low disease activity since 2013

SLE = systemic lupus erythematosus; DH = Denver Health
AZA = azathioprine; HCQ = hydroxychloroquine
LS

\(^1\text{Zard Autoimmune Rev 2014}\)
ASR: How to treat her hot flashes?

A. Systemic estrogen
B. Duloxetine
C. Gabapentin
D. Need more data
ASR: Which of the following is most important to inform treatment choice?

A. Repeat ANA, SSA

B. Anti-cardiolipin and anti-B2 glycoprotein antibodies, with lupus anti-coagulant

C. Bone density test results
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Please see slide at presentation
Let’s parse these treatment options

A. Systemic estrogen
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C. Gabapentin
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A. Systemic estrogen
B. Duloxetine
C. Gabapentin
ASR: If she were pre-menopausal what contraception would you recommend?

A. Combined oral contraceptive
B. Barrier method only
C. Progesterone releasing IUD
Contraception in SLE

• Pregnancy should be planned, so contraception is paramount
• DepoProvera associated with reversible low BMD
• Implants are often the easiest LARC option inpatient when urgent- eg starting cyclophosphamide
• Progesterone releasing IUD often the preferred option
• Copper IUD okay, but given association with increased bleeding can be an issue with anemia, thrombocytopenia
• Avoid estrogen in the presence of APLA regardless of thrombotic history
Please see slide at presentation
Learning Objectives

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Nevskaya Clin Exp Rheum 2017
Gladman Lupus 2018
AVN in lupus

Nevskaya Clin Exp Rheum 2017
What should we do with her immunosuppression?

A. Stop AZA one week prior to surgery
B. Stop AZA one day prior to surgery
C. Continue AZA without adjustment
Perioperative medication management

Goodman Arthritis Rheum 2017
Perioperative medication management

Goodman Arthritis Rheum 2017
Perioperative medication management

Goodman Arthritis Rheum 2017
What should we do with her immunosuppression?

A. Stop azathioprine (AZA) one week prior to surgery
B. Stop AZA one day prior to surgery
C. Continue AZA without adjustment
What should we do with her immunosuppression?

Goodman Arthritis Rheum 2017
Perioperative steroid management

Hamrahian UpToDate 2018
Perioperative steroid management

Hamrahian UpToDate 2018
VTE prophylaxis for LS

Falck-Ytter Chest 2012
Arthroplasty in SLE

Learning Objectives

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Returns, for evaluation of 48 hours of dysuria.

- Current meds: AZA 125mg (2.5mg/kg), HCQ 200mg (4mg/kg)
- No recent antibiotics or steroids
- Afebrile, non-toxic appearing, no CVA tenderness
- UA is notable for positive nitrites, 50-100 wbc's, no squamous epithelial cells
ASR: Which of the following treatment regimens would you use?

A. nitrofurantoin 100 mg po bid x 5 days
B. cefdinir 300 PO BID X 5 days
C. TMP-SMX DS 1 tab PO BID x 5 days
Why not nitrofurantoin?

A. nitrofurantoin 100 mg po bid x 5 days
B. cefdinir 300 PO BID X 5 days
C. TMP-SMX DS 1 tab PO BID x 5 days

Complicated cystitis due to her immunosuppression
Why not TMP-SMX?

A. nitrofurantoin 100 mg po bid x 5 days
B. cefdinir 300 PO BID X 5 days

C. TMP-SMX DS 1 tab PO BID x 5 days

sulfa increases sun sensitivity, may cause leukopenia, and increase flare risk
Why cefdinir?

A. nitrofurantoin 100 mg po bid x 5 days
B. cefdinir 300 PO BID X 5 days
C. TMP-SMX DS 1 tab PO BID x 5 days

Variety of options
Not sulfa
Treat complicated infection
Incorporate local antibiogram and other patient factors
What should we do with her lupus meds?

Continue HCQ and

A. Continue AZA
B. Hold AZA
C. It depends on diagnosis, disease severity, infection severity
Medication Adjustment in Infection

• hydroxychloroquine can typically be continued
• leflunomide can be stopped but takes months to clear – so will still be affecting patient
• prednisone should not be stopped due to risk of (relative) adrenal insufficiency
• In severe disease, or for patients on high dose steroids, please call to discuss
Medication Adjustment in Infection

• Biologics always get held for serious infection
• I hold biologics for any infection requiring antibiotics
• If a patient is on tocilizumab (for rheumatoid arthritis) c-reactive protein is unreliable
• Tofacitinib especially associated with zoster reactivation
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Returns. Dysuria has resolved. She is doing well, remains on her maintenance medication regimen of AZA 125mg (2.5mg/kg), HCQ 200mg (4mg/kg)

Also, she knows it is October and is ready to
• Does she need other vaccines?
• Are there vaccines she should avoid?
Considerations in vaccination

ACIP General Best Guidance for Immunization: Altered Immunocompetence
Vaccinations – inactivated vaccines

Garg Autoimmun Rev 2018
Kroger accessed at CDC.gov
Pneumococcal Recommendations for Adult 19-64 with certain medical conditions

Slide from Dr. Laura Hurley
Vaccination

Patients with SLE can have functional asplenia
Vaccination in SLE – HPV

Zard Autoimmun Rev 2014

HPV = human papilloma virus
Vaccination – herpes zoster (HZ)

• Patients with SLE are at increased risk for HZ independent of immunosuppression
• Patients with rheumatoid arthritis are at increased risk for HZ independent of immunosuppression
• Immunosuppression also increases risk for HZ
• Certain meds profoundly so – notably tofacitinib (JAK-STAT inhibitor used in RA)
Vaccination – herpes zoster (HZ)

Dooling MMWR 2018
Clinical Review SHINGRIX 2017
Garg Autoimmun Rev 2018
Vaccination – live vaccines?

**YES – LOW DOSE IMMUNOSUPPRESSION**

- chronic prednisone < 20 mg daily
- low-dose methotrexate ≤0.4 mg/kg/week
- Azathioprine ≤3.0 mg/kg/day
- 6-mercaptopurine ≤1.5 mg/kg/day

**NO – MODERATE TO HIGH DOSE IMMUNOSUPPRESSION**

- chronic daily prednisone ≥ 20 mg daily
- mycophenolate mofetil
- cyclophosphamide
- biologic therapies
Vaccination – live vaccines?

- MMR
- varicella
- LAZV aka Zostavax
- Oral typhoid (live attenuated)
- Yellow fever

**MODERATE TO HIGH DOSE IMMUNOSUPPRESSION**

- chronic daily prednisone ≥ 20 mg daily
- mycophenolate mofetil
- cyclophosphamide
- biologic therapies

LAZV = live attenuated zoster vaccine
Summary

• Know APL status prior to use of estrogen
• Systemic estrogen can be used in SLE in remission in absence of APL
• Access guidelines for peri-operative management of immunosuppression
• Consider immunosuppressed status when treating infections
• Consider immunosuppressed status when vaccinating

Credit: Photowitch | Dreamstime.com
Thank you

Questions?

Contact

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CDC Vaccine Recommendations in Altered Immunocompetence [Internet]. [accessed 11 Nov 2018];Available from: https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/immunocompetence.htm


Freeman EW et al. Associations of hormones and menopausal status with depressed mood in women with no history of depression. Arch Gen Psychiatry. 2006 Apr;63(4):375-82.


Extra Slides & Tables
Contraception in SLE

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Perioperative medication management

Goodman Arthritis Rheum 2017
Effects of medications on vaccines

Friedman Rheum Dis Clin N Am 2017