Optimizing care of rheumatology patients in the primary care setting

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February 2019

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**
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- Manage steroids perioperatively
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- Manage immunosuppression in patients with infections
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LS

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]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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[1]West Rheum Secrets 2015
[2]Lateef J Autoimmun 2012

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

Lateef J Autoimmun 2012

LS

Please see slide at presentation

Let’s parse these treatment options

A. Systemic estrogen
B. Duloxetine
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LAC = lupus anticoagulant

Lateef J Autoimmun 2012
Petri NEJM 2005

Let’s parse these options

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Wang Pain Med 2015[1]
Palagini Lupus 2013[2]
Freeman Arch Gen Psych 2006[3]

Let’s parse these options

A. Systemic estrogen
B. Duloxetine
C. Gabapentin

Dimitroulas Sem Arthritis Rheum 2014

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

- Manage hormonal therapies in post-menopausal women with autoimmune disease
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LS

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

Hamrahian UpToDate 2018

Perioperative steroid management

Hamrahian UpToDate 2018

https://www.cdc.gov/features/blood-clot-awareness/index.html

Lee & Pope Arthritis Res Ther 2014

Falck-Ytter Chest 2012

VTE prophylaxis for LS

Falck-Ytter Chest 2012

Arthroplasty in SLE

Kasturi Curr Rheum Rep 2016

Learning Objectives

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- **managing infections in patients on immunosuppression**
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LS

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 wbcs, no squamous epithelial cells

ASR: Which of the following treatment regimens would you use?

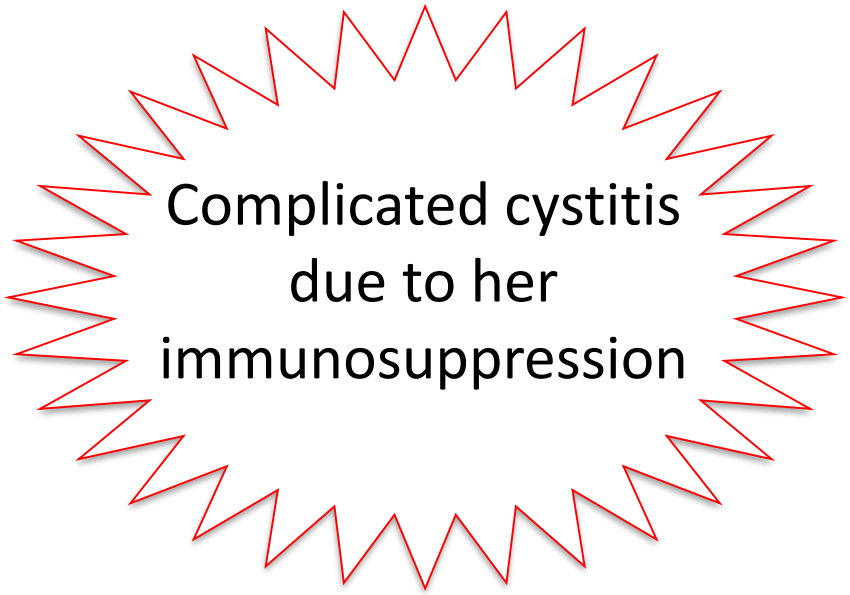
A. nitrofurantoin 100 mg po bid x 5 days
B. cefdinir 300 PO BID X 5 days
C. TMP-SMX DS 1 tab PO BID x 5 days

Why not nitrofurantoin?

~~A. nitrofurantoin 100 mg po bid x 5 days~~

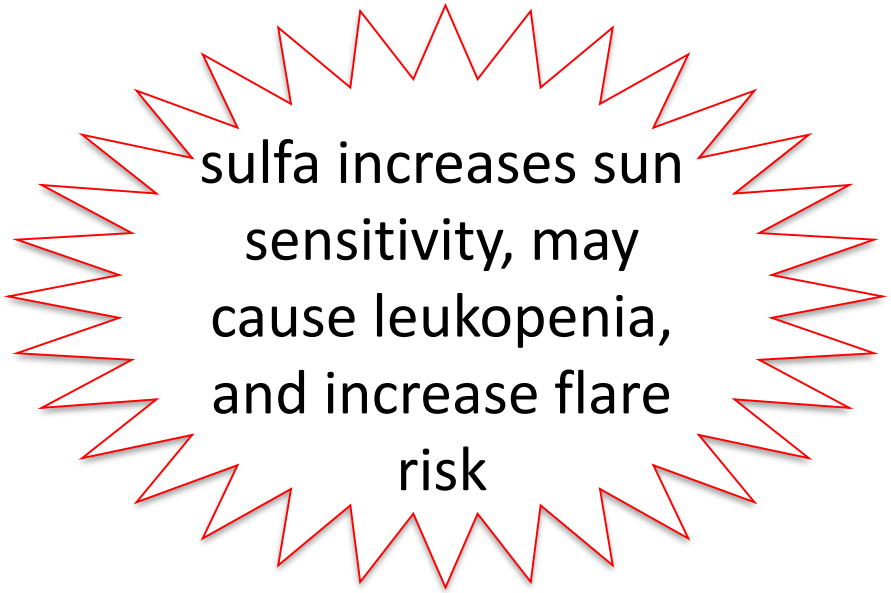
B. cefdinir 300 PO BID X 5 days

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



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~~



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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- **vaccinating patients with autoimmune disease**

LS

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

LS

- 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

Barber Curr Opin Rheum 2011

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 IMMUNOSUPPRESION

- 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?

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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