Lupus during Pregnancy

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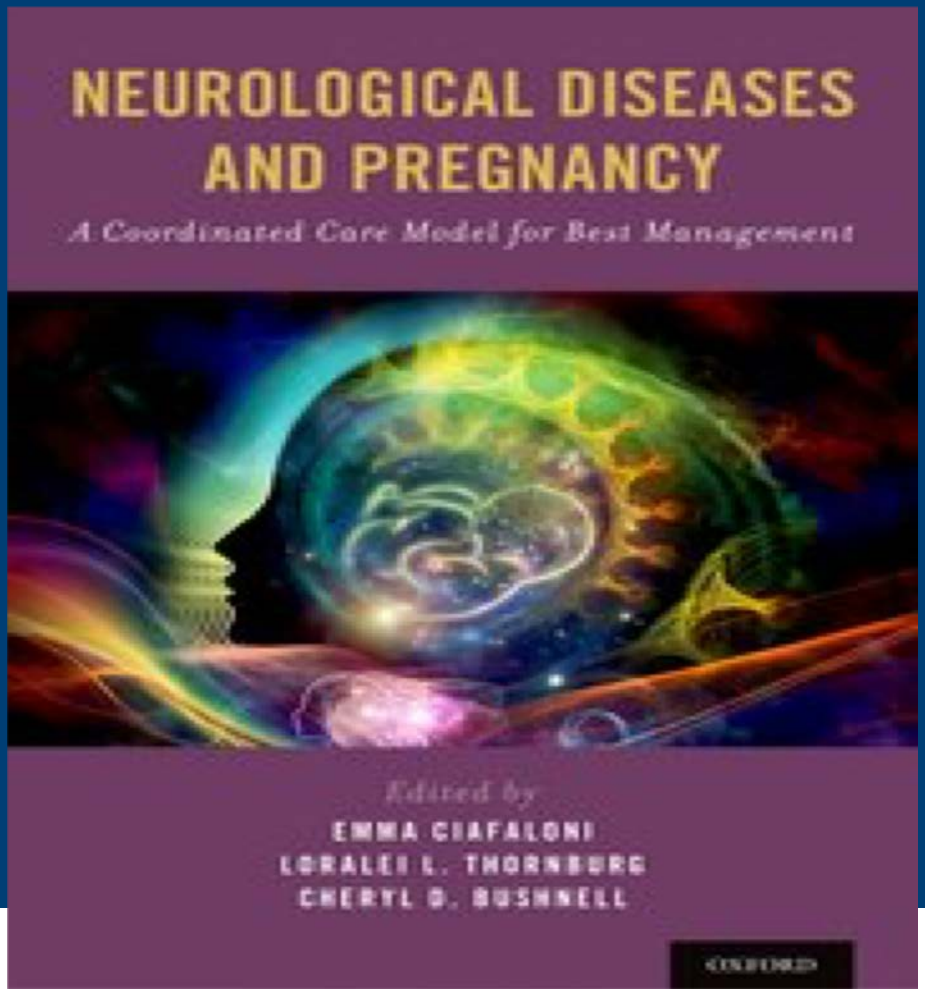
Disclosure

I have no conflicts of interest to disclose

- I have a book and could (theoretically) get royalties



Objectives-
To develop an understanding of:

- Preparing for pregnancy when you have SLE
- How pregnancy can affect SLE course/progression
- How SLE can affect pregnancy
  - Mother
  - Fetus
- How your pregnancy care may change with SLE
- Affects of SLE on the infant & newborn

Systemic Lupus Erythematosus

- Multisystem autoimmune rheumatic disease
  - Complex manifestations & unpredictable course
  - Wide range of effects
  - Highly variable patient symptoms
  - Some patients with serious musculoskeletal, renal, and cardiovascular effects.
- Predominantly women
  - Female-to-male ratio during the reproductive years (ages 15 to 44 years) is 9:1
  - One of the best studied autoimmune diseases in pregnancy
- Pregnancy oncomes related to specific disease manifestations & antibodies

Can I even do this?

- Most women with autoimmune disease will have a normal pregnancy
  - Disease quiescence and control prior to pregnancy improve outcomes
  - Need involvement with MFM doctors to plan & follow closely
- There is increased risk
  - Depends on exact disease manifestations
  - Antibodies present
- Some patients probably should not …
  - Arterial clots with antiphospholipid syndrome
  - Lupus nephritis
  - Renal insufficiency

How will pregnancy affect my SLE?

- Long-term prognosis not affected by pregnancy
- Flairs:
  - Unclear if pregnancy affects the flair rate
  - 15% to 60% of women flare in pregnancy
  - Lower rate if in good control for at least 6 months before conception.
- May flare during any trimester of pregnancy or after delivery

Getting ready, changes in care, risks of pregnancy

PREGNANCY CARE

Getting ready for pregnancy

- Get in control!
  - Best outcomes control at least 6 months before conception
- Get on the right stuff! - Medication adjustment
  - Assure medications best choice for pregnancy
  - Consider adding hydroxychloroquine (Plaquenil)
  - Consider adding baby aspirin (81 mg) to reduce early loss & preeclampsia risk
- Check for other autoimmune thyroid disease if not done in last year
- Don’t forget the basics!
  - Update all vaccinations
  - Eat right, engage in healthy moderate exercise
  - Start prenatal vitamin (with folic acid) 3 months ahead

Getting ready for pregnancy

- Considering meeting with an MFM physician
- Review SLE risks specific to
  - your symptoms and affected organs
  - your antibodies
  - your pregnancy history
  - Other medical history & concerns
  - Age or other family genetics concerns

- Learn more about MFM, find MFMs around the country
  - www.smfm.org/whatwedo
- MFM at URMC
  - www.urmc.rochester.edu/ob-gyn/maternal-fetal-care.aspx

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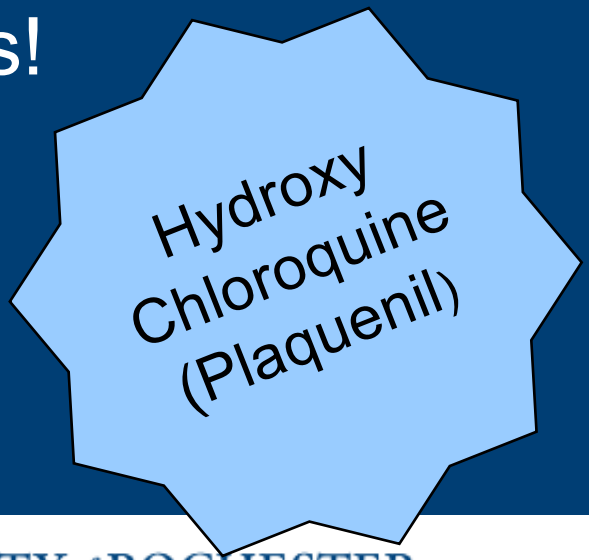
Anti-inflammatory & biologic medications in pregnancy

- Control >>> uncontrolled (regardless of medication)
- Monotherapy as much as possible
- Lowest dose needed to control symptoms
- Least teratogenic medication possible
- Work to avoid triggers- especially PP (high risk time)
- Consider adding medications known to improve outcomes!



∞ hydroxychloroquine
∞ aspirin

Go for it! Shown to IMPROVE outcomes

∞ azathioprine
∞ acetaminophen
∞ heparin/low-molecular weight heparin

Generally considered safe
But, consider risks/benefit & pregnancy timing

∞ ibuprofen (till 20 wks)
∞ steroids

∞? Belimumab (minimal/no data)

Do not use

Cyclophosphomide
Methotrexate
Mycophenolate mofetil (cellcept)
Leflunomide
Rituximab

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∞ generally compatible with breastfeeding

More medication questions?

MotherToBaby
UR MEDICINE
Medications & More During Pregnancy & Breastfeeding
Ask The Experts

(585) 275-3638 or 1 (844) 352-3420 (toll-free)
Or email MotherToBaby@urmc.rochester.edu
Chat & info at mothertobaby..org

More Lactation questions?

Lactation study center 275-0088 & Lactation Medicine 276-MILK
www.urmc.rochester.edu/breastfeeding.aspx

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How might my pregnancy care be different?

- Will probably see your OB provider more often
  - Watch for pregnancy complications (like preeclampsia)
  - Watch for flare symptoms
  - May need more ultrasounds to watch baby's growth
  - May need non-stress tests once or or twice weekly later in pregnancy

- Will likely need extra visits with rheumatology team extra
  - Watch for flare symptoms
  - May follow complement and anti-DNA titers

What if I flare in pregnancy?

- Mild SLE flares
  - skin and joints generally low risk
- Renal/kidney flares increase risk pregnancy complications
- Severe flares - increase risks to pregnancy

How do I prevent a flare in pregnancy?

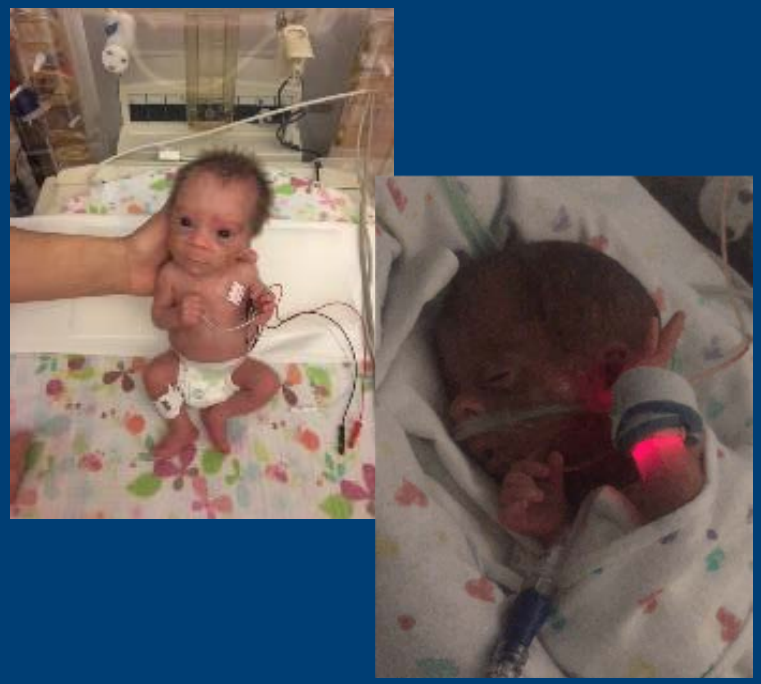
- Be in control before pregnancy > 6 months
- Steroids do not prevent flares
- Hydroxychloroquine (Plaquenil) may help

How will SLE effect my pregnancy?

- Slight increase incidence pregnancy loss
  - 16-40% women with SLE will have at least 1 early loss
  - Even higher in those with anti-phospholipid or renal disease
  - Increased risk primarily in patients with:
    - Lupus anticoagulant (LA)
    - Anticardiolipin antibodies (ACLA)
    - B2-glycoprotien

How will SLE effect my pregnancy?

- Increased incidence of pregnancy complications
  - Early labor
  - Growth restriction for the baby
  - Early delivery due to complications
  - Cesarean delivery



- Complications related to:
  - Disease control at conception
  - Severe flares in pregnancy
  - Presence of ACLA antibodies (LAC, ACLA, Beta2)
  - Renal disease

Preeclampsia

- Disease of pregnancy characterized by elevated blood pressure & protein in urine
- Symptoms including swelling, headache
- Can effect kidney & liver function
- Only cure is delivery

PREECLAMPSIA foundation

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Preeclampsia & SLE

- Increased risk for PreE in SLE
  - 14% higher than general population
  - Highest risk with:
    - Renal involvement
    - Poor disease control at conception
    - Anti-phospholipid syndrome & antibodies
- PreE can be VERY difficult to distinguish from lupus nephritis

SLE - EFFECTS ON THE BABY

How could SLE effect my baby?-

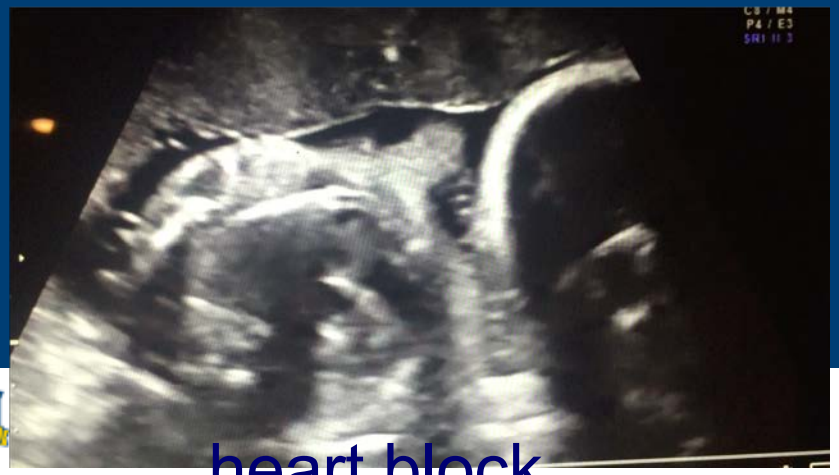
- Increased risk growth restriction & early delivery
- Risks of a few more rare, but serious complications including:
  - Neonatal Lupus
  - Congenital Heart Block

Neonatal Lupus

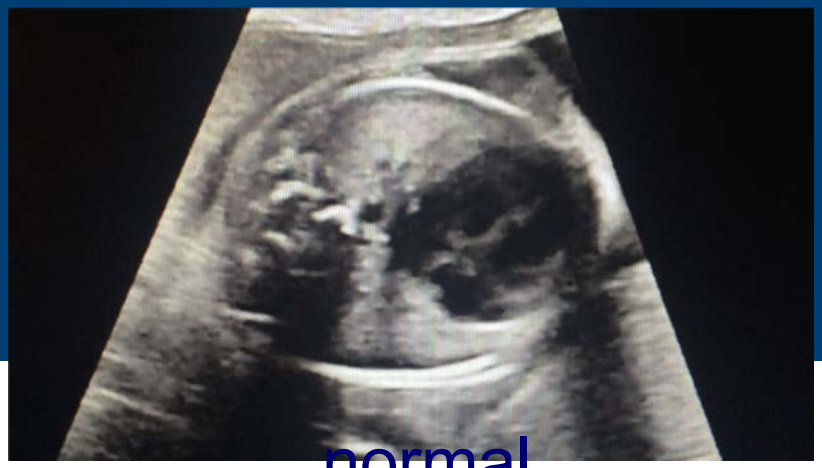
- 1% of infants will have transient lupus-like syndrome due to antibodies crossing placenta
- Erythematous skin lesions of the face, scalp and thorax
- Most associated with anti-Ro (SSA) anti-La (SSB)
- Symptoms:
  - May be present at birth
  - Generally appears within first few weeks
  - Usually resolves by 12 months

Congenital heart block

- Antibody-mediated inflammation and fibrosis of the electric system of the heart (atrioventricular node)
  - Can get secondary fibrosis of heart muscle as well
  - Low heart rate - 60 bpm instead of 120-160 bpm
- Often the first manifestation of lupus!
  - 30-60% patients with infant with congenital heart block but no SLE will develop eventually develop
- Anti-Ro is primary mediator



heart block



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How could SLE effect my baby?- Congenital heart block

- Associated with anti-Ro (SSA) in 83% of cases and less often with anti-La (SSB)
- Only 1:20 women with anti-Ro will develop CHB
  - 1:3 with prior affected fetus
- Neonatal outcomes:
  - Mortality high (30%) (especially when occurs before 20 weeks)
  - Most children require pacemakers
- No known effective therapy
  - dexamethazone and IVIg have been tried

Lupus nephritis, ACLA syndrome

WHAT IF I ALREADY HAVE MEDICAL COMPLICATIONS?

Lupus Nephritis in Pregnancy

- 10% incidence of permanent renal dysfunction from pregnancy
- 30% incidence of transient renal impairment during pregnancy
- With baseline creatinine >1.5 there is a 50% fetal loss rate

Anti-cardiolipin Antibody Syndrome

- Increased risk to mom & baby
  - Recurrent early pregnancy loss
  - Late pregnancy loss
  - Preeclampsia/maternal complications (especially severe, early varieties)
- Those with arterial thrombosis especially high risk & should likely avoid pregnancy
- Aspirin & heparin/low-molecular weight heparins may moderate risks

Summary- Pregnancy with SLE

- In general pregnancy will have no long-term effect on outcome of SLE.
- Rheumatologic diseases carry additional risks to patients & their babies in pregnancy
- Meet with MFM to plan pregnancy to review YOUR specific risks
- Getting under control before pregnancy KEY to good outcomes!