SLE and RA in Pregnancy

Internal Medicine Academic Half Day, 2010
Dr. Thomas Jacob, FRCPC
Internal Medicine, Rheumatology, Critical Care
Overview

- Discuss relevant issues of SLE in pregnancy
- Case discussion
- Relevant Issues in RA
Medical Care of the Pregnant Patient – Key Principles

- Effect of pregnancy on disease
- Effect of disease on mother
- Effect of disease on fetus
- Effect of medications (teratogenicity / breast feeding)
- Postpartum course of disease
Effect of Pregnancy on SLE - Fertility

- SLE patients have no problem with fertility
- Only exception is in patients with premature ovarian failure secondary to cyclophosphamide
Effect of Pregnancy on SLE - Flares

- Can pregnancy aggravate SLE? Maybe
- What is the patient’s specific disease profile?
- What is the disease activity at the time of conception?
  - SLE active – 50-60% flare rates
  - SLE inactive – 10-20% flare rates
- What was the course of SLE in previous pregnancies?
- Severity of flares may depend on specific disease profile (worse with nephritis and antiphospholipid syndrome)
- Timing of flares is equal in all trimesters
Effect of disease on mother

- Worsening nephritis (most dreaded)
- Thrombosis related to antiphospholipid syndrome – pregnancy loss, thrombosis
- Superimposed preeclampsia
Effect of disease on fetus

- Stillbirth
- IUGR
- Prematurity
- Neonatal Lupus
  - Rash
  - Thrombocytopenia
  - Complete Heart Block
Effect of drugs - Teratogenicity

- Methotrexate
- Cellcept
- Cyclophosphamide
Effect of drugs - Steroids

- Fetal adrenal insufficiency – only if dexamethasone or betamethasone used
- Stress coverage during delivery/LSCS
- Diabetes
- Preeclampsia
Effect of drugs - NSAIDs

- Avoid if attempting to conceive / early pregnancy - increases risk of abortion
- D/C in 3rd trimester – causes premature closure of ductus arteriosus
Effect of drugs – Breast Feeding

- Methotrexate
- Cellcept
- Cyclophosphamide
Postpartum course

- ? 6-8 week flare
Case 1

- 28 F with history of SLE. G1P1. Wants to get pregnant. Consulted with respect to lupus in pregnancy.
Case 1

- SLE diagnosed at 23yrs.

Clinical Profile
- Rash
- Oral ulcers
- Arthralgias
- Pleuritis
- Inactive x 3 yrs

Serology profile
- ANA 1:128
- C3/C4 low with flares
- Anti-dsDNA negative
- Anti-Ro/La negative

Treatment
- Cellcept 1gm po bid x 2 years
- No prednisone x 1.5 years
- Previously Imuran and prednisone for flares
- 1st pregnancy 3 years ago, uneventful, flare 2 months postpartum while on Imuran
- No DVT/PE

O/E:
- Vitals – N
- CVS/RS/ABD/CNS – N
- No DVT
Case 1

- CBC – N
- Lytes/Creat – N
- LFTs – N
- U/A – no proteinuria
- FBS – N
- CXR - N

- ANA 1:128
- C3/C4 – N
- ESR/CRP – N
- Anti Ro/La negative
- Anti-dsDNA negative
- Lupus inhibitor / APLA negative
Case 1

- SLE inactive
- Cellcept is teratogenic in animals

- Fertility should not be a problem
- Pregnancy should be delayed till Cellcept switched to Imuran and stable x 3-6 months
Case 2

- 25 F with h/o SLE. G₁P₀ at 20wks. Asked to see with respect to lupus in pregnancy
Case 2

- SLE diagnosed at 21 yrs.
- Clinical Profile
  - Rash
  - Arthralgias
  - Lupus nephritis (stage 3, active)
- Serology profile
  - ANA 1:1280
  - Low C3/C4 with flares
  - Anti-dsDNA +++
- Treatment
  - Prednisone 30 mg daily
  - Completed Cyclophosphamide x 6 three months ago

- No previous pregnancies
- No DVT/PE
- No history of DM, HTN, Headaches
- No FHx of CTD
- O/E:
  - Vitals – BP 160/90
  - CVS/RS/PA - N
  - No DVT
  - Cushingoid
  - ? Periorbital edema
  - Pedal edema 3+
  - No focal neuro deficit
Case 2

- CBC – N
- Lytes – N
- GTT - N
- LFT’s – N
- Creatinine – 140
- U/A – Protein 1-5
- 24 hr. U. Protein = 2gm
- Creat Cl. = 60

- ANA 1:1280
- Anti-dsDNA +++
- Low C3/C4
- Lupus inhibitor / APLA negative
- Anti-Ro/La negative
- CXR - N
Case 2

- Active Lupus Nephritis
- High Risk Pregnancy
- Significant Risk to Mother
- Long term steroids

- Increase prednisone to 1-1.5mg/kg
- May need pulse methylprednisolone
- May need pulse cyclophosphamide with medical termination of pregnancy
- Stress coverage for delivery

- High risk obstetric care referral
- Urgent rheumatology consult
- Follow-up q1-2 wks
- Repeat 24hr. U q2-4wks
- GTT at 20wks
30 F with SLE. G1P0 at 24 weeks GA. Consulted with respect to Lupus in pregnancy. History of SLE had been missed during early obstetric care.
Case 3

- SLE diagnosed at 26yrs.

Clinical Profile
- Rash
- Arthritis
- Pericarditis / Pleuritis
- Inactive x 3 yrs.

Serological Profile
- ANA 1: 512
- C3/C4 normal during flares

Treatment
- Off Imuran x 2 yrs
- No Prednisone x 3 yrs.
- No DVT/PE
- No FHx of CTD
- No HTN / DM

O/E:
- Vitals – N
- CVS/RS/ABD/CNS – N
- No DVT
- FHS - N
## Case 3

- CBC – N
- Lytes/ Creat – N
- LFTs – N
- ESR/CRP – N
- U/A – N
- CXR - N
- ANA 1:512
- C3/C4 – N
- Anti-dsDNA negative
- Anti-Ro +++
- Lupus inhibitor / APLA negative
Case 3

- High risk pregnancy
- Risk to fetus – neonatal lupus
  - Rash - Annular Lesions
  - Thrombocytopenia
  - Heart Block

- Fetal Pulsed Doppler ECHO q1wk from 16-25 wks then q2wk from 26-32 wks
- If incomplete HB then dexamethasone or betamethasone
- If complete HB then pediatric cardiology consult for ? pacemaker
- If no HB after neonatal period then will not develop HB related to neonatal lupus
- Thrombocytopenia and rash are transient (6-12wks)
Case 4

- Consult from obstetric service. 30 F at 24wk GA. G2P0. Now short of breath. $O_2$ sat 85% on R/A, 93% on 5L NP. Rest of vitals stable. History of lupus.
Case 4

- SLE diagnosed at 25 yrs.
- Clinical profile
  - Rash
  - Arthritis
  - Oral ulcers
- Serological profile
  - ANA 1:256
  - C3/C4 – N during flares

- Treatment
  - Previously Imuran and Prednisone
  - No Rx for 3 years
- Previous miscarriage at 12 weeks
- O/E:
  - Vitals stable on 5L NP
  - CVS/RS/ABD/CNS – N
  - R calf swollen
Case 4

- CBC – N
- Lytes/Creat – N
- LFTs – N
- ESR/CRP – N
- U/A – N
- CXR – N
- V/Q scan – high probability for PE

- ANA 1:256
- C3/C4 – N
- Anti-dsDNA negative
- Anti-Ro/La negative
- Lupus inhibitor +
- APLA IgG positive – moderate titre
Antiphospholipid Antibody Syndrome

Lupus inactive but triples risk of fetal loss, thrombocytopenia and thrombosis with APLA syndrome

Risk to Mother
- Thrombocytopenia
- Pre-eclampsia

Risk to Fetus
- Thrombocytopenia
- Pregnancy Loss
- IUGR
- Prematurity

Aspirin + LMWH (check activated Xa level once every trimester)

Warfarin and unfractionated heparin have drawbacks

Recheck APLA titres in 6 weeks
Case 5

33 F with RA. G2P2. Wants to become pregnant. On MTX and LFN.
Case 5-Relevant Issues

- Disease activity- 70-80 % go into remission
- No marked effect on mother / fetus
- Medications
  - MTX, LFN contraindicated (teratogenicity)
  - LFN should be washed out with cholestyramine
  - Patients should ideally be MTX/LFN free for 3 months before conceiving
- MTX and LFN and excreted in breast milk, contraindicated if breast feeding
- Check for cervical spine involvement
- Assess for steroid stress coverage at delivery/LSCS
- Postpartum and post-abortion flare can be anticipated within 3 months
Summary

- What are the key principles of medical care in obstetric patients?
- How do you profile SLE in a patient?
- What are the three dreaded complications of SLE in pregnancy?
- What are the clinical features of neonatal lupus?
- What are the diagnostic criteria for antiphospholipid syndrome?
- What drugs are contraindicated in pregnancy?
- What are the key issues in assessing RA in pregnancy?
Questions?