

Facilitator's Guide for Navigating Reproductive Health in Patients with Systemic Lupus Erythematosus (SLE)



Acknowledgements

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ACRreprohealthinitiative.com

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Getting started

Navigating Reproductive Health in Patients with Systemic Lupus Erythematosus (SLE) was created by the American College of Rheumatology (ACR), to educate prescribing providers and their healthcare teams on how to manage and treat Systemic Lupus Erythematosus (SLE) in patients of reproductive age. Utilizing the 2020 American College of Rheumatology (ACR) Guidelines for Reproductive Health in Rheumatic Disease as the foundation, this program will explore the importance of pre-conception counseling, medications compatible with pregnancy and lactation, as well as how to educate patients on how to prepare for the best pregnancy outcomes given their disease status. Using case studies, this program will walk providers through charts in the guidelines and discuss the appropriate considerations, lab tests, and conversations that non-rheumatology and rheumatology providers should be aware of in order to best care for their patients and their growing families.

Learning objectives

At the end of this presentation, learners will be able to:

- Appreciate the impact of pregnancy on SLE disease activity and the risk of adverse pregnancy outcomes in women with SLE
- Recognize the importance of pre-conception counseling
- Identify disease specific management for pregnant SLE patients including the safety of common SLE meds in pregnancy and lactation

Length of the activity

The presentation and discussion should last approximately 60 minutes, including time for Q&A. Plan for an additional 10 minutes for attendees to complete the post-test assessment, which can also be done up to 2 weeks after the session.

What you need

- Computer and audio/visual equipment for projection of the PowerPoint presentation to the audience
- Guide for Navigating Reproductive Health in Patients with Systemic Lupus Erythematosus (SLE) PowerPoint presentation
- Facilitator's Guide
- SLE Handouts (2)

Importance of evaluation: the pre and post test

To continue to improve this education for others, it is important that we get feedback on:

- What are the participants learning from this session?
- How can this session be improved?
- What additional information would be helpful?

Your evaluations and insight allow the ACR to identify additional learner audiences and areas of interest regarding reproductive health and rheumatic disease.

Please be sure to encourage your learners to take the pre-test prior to the session, and the post-test at the completion of the session. If you have questions, please speak with your organization's point of contact.

Learning Objectives

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- Recognize the **importance of pre-conception counseling**
- Identify **disease specific management** for pregnant SLE patients including the safety of common SLE meds in pregnancy and lactation

Notes

 **Read** slide as presented

Systemic Lupus Erythematosus

- **Multisystem disease** affecting many organ systems
- Occurs in **reproductive aged woman**
- **More common and more severe** in Black or African-American, Hispanic and Asian populations
- Active disease can lead to **poor pregnancy outcomes**

Notes

☰ **Read** slide as presented

⚠ **Emphasize** that SLE is typically more common and more severe in Black or African-American, Hispanic, and Asian populations

SLE and Family Planning

Basic premises:

- When discussing family planning with patients, one must **be respectful of differences** in individual's attitudes that often reflect cultural, religious, and personal values
- As SLE disproportionally affects racial and ethnic minorities, one must **be mindful of existing healthcare disparities** when discussing management options
- Providers should **self-reflect on their unconscious biases** when discussing family planning with patients

Notes

 **Read** slide as presented

 **Emphasize** the importance of being mindful of existing healthcare disparities when discussing management options with patients

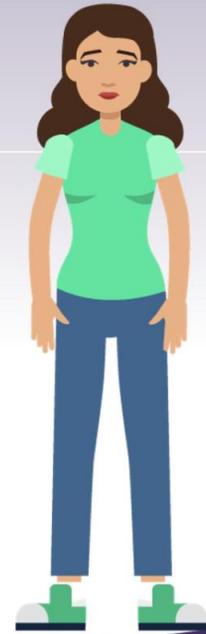
 **Emphasize** the importance of self-reflection on one's unconscious bias when discussing family planning with patients

Lupus in Pregnancy Case

Lupus in Pregnancy

Let's Start with a Case

- Clara is an 18 y.o. female with history of SLE and Lupus Nephritis (LN) class III seen in routine follow up for primary care
- She is taking hydroxychloroquine (HCQ) and prednisone 2.5mg. Formerly on mycophenolate but weaned off of this medication 3 years ago
- Recently developed arthritis and she was started on methotrexate



Notes

 **Read** slide as presented

Conversation

At her visit, what is the one key question to address at this encounter regarding her reproductive health?

Would you like to become pregnant in the next year?



Notes

 **Read** slide as presented

Conversation



She answers....

- Clara replies she would not like to become pregnant within the year, but may become sexually active
- You counsel her regarding contraception and pregnancy avoidance given that methotrexate is teratogenic and abortigenic

Notes

 **Read** slide as presented

Conversation

What lab data do you need to help aid your discussion of contraception?

Her antiphospholipid antibody panel (aPL)

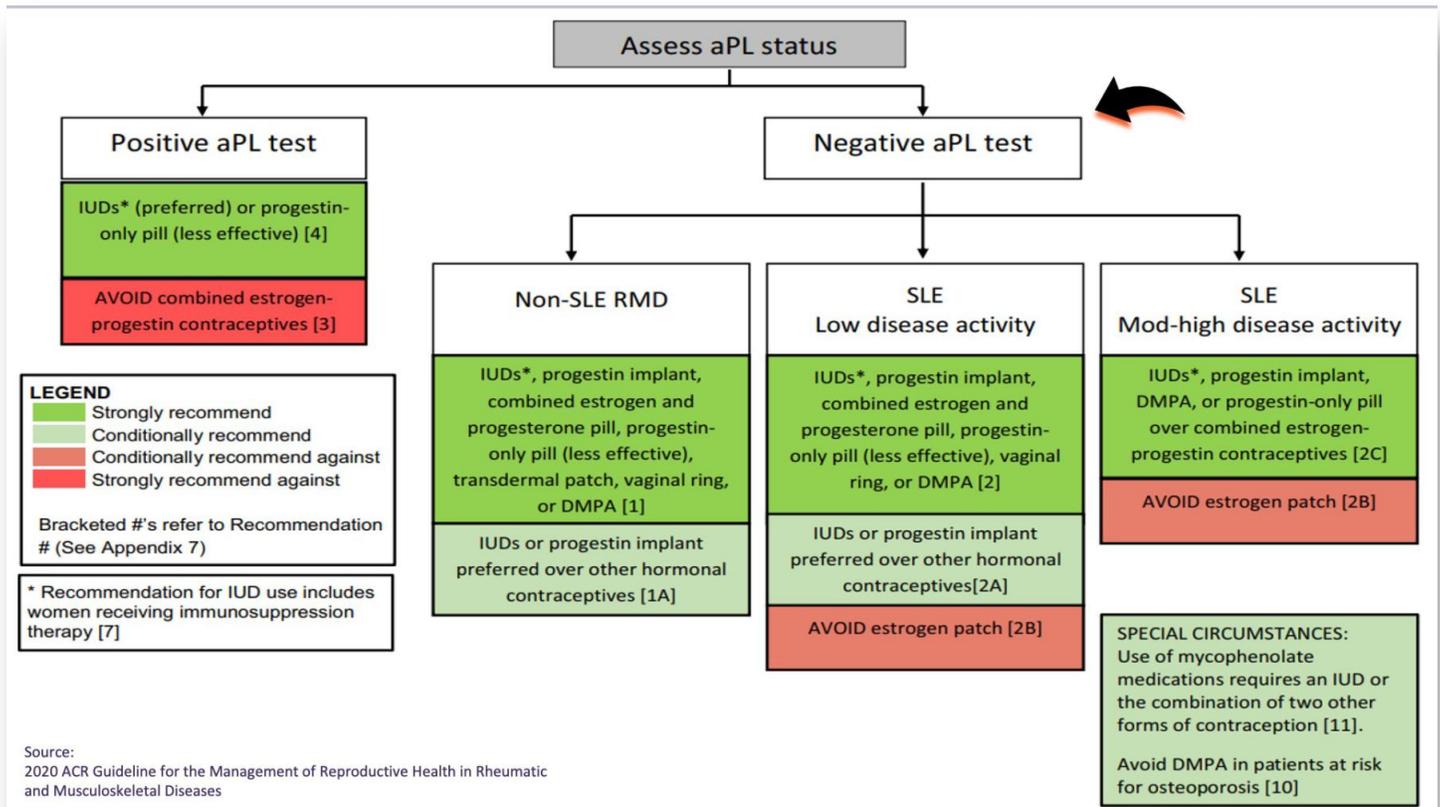
- Anti-Cardiolipin IgG/IgM
- Anti-Beta-2-glycoprotein IgG/IgM
- Lupus anticoagulant also called DRVVT



Notes

 **Read** slide as presented

Assessing aPL Status



Notes

Say that this is a flowchart from the 2020 ACR Guideline for the Management of Reproductive Health in Rheumatic and Musculoskeletal Diseases

Facilitator's Note: RMD: Rheumatic and Musculoskeletal Disease

Walk the audience through the flow chart, based on whether the results were positive or negative (Clara's aPL test was negative)

Click to the next slide, and the Negative aPL section will zoom in automatically

If the aPLs Are Negative

Clara's aPLs are negative

IUD=Intrauterine device (hormonal or copper)
RMD= Rheumatic and musculoskeletal disease
DMPA= Depot medroxyprogesterone acetate
"Depo" shot

Negative aPL test

↓

SLE
Low disease activity

IUDs*, progestin implant,
combined estrogen and
progesterone pill, progestin-
only pill (less effective), vaginal
ring, or DMPA [2]

IUDs or progestin implant
preferred over other hormonal
contraceptives[2A]

AVOID estrogen patch [2B]

LEGEND

Strongly recommend

Conditionally recommend

Conditionally recommend against

Strongly recommend against

Bracketed #'s refer to Recommendation # (See Appendix 7)

Source:
2020 ACR Guideline for the
Management of
Reproductive Health in
Rheumatic and
Musculoskeletal Diseases



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Empowering Rheumatology Professionals

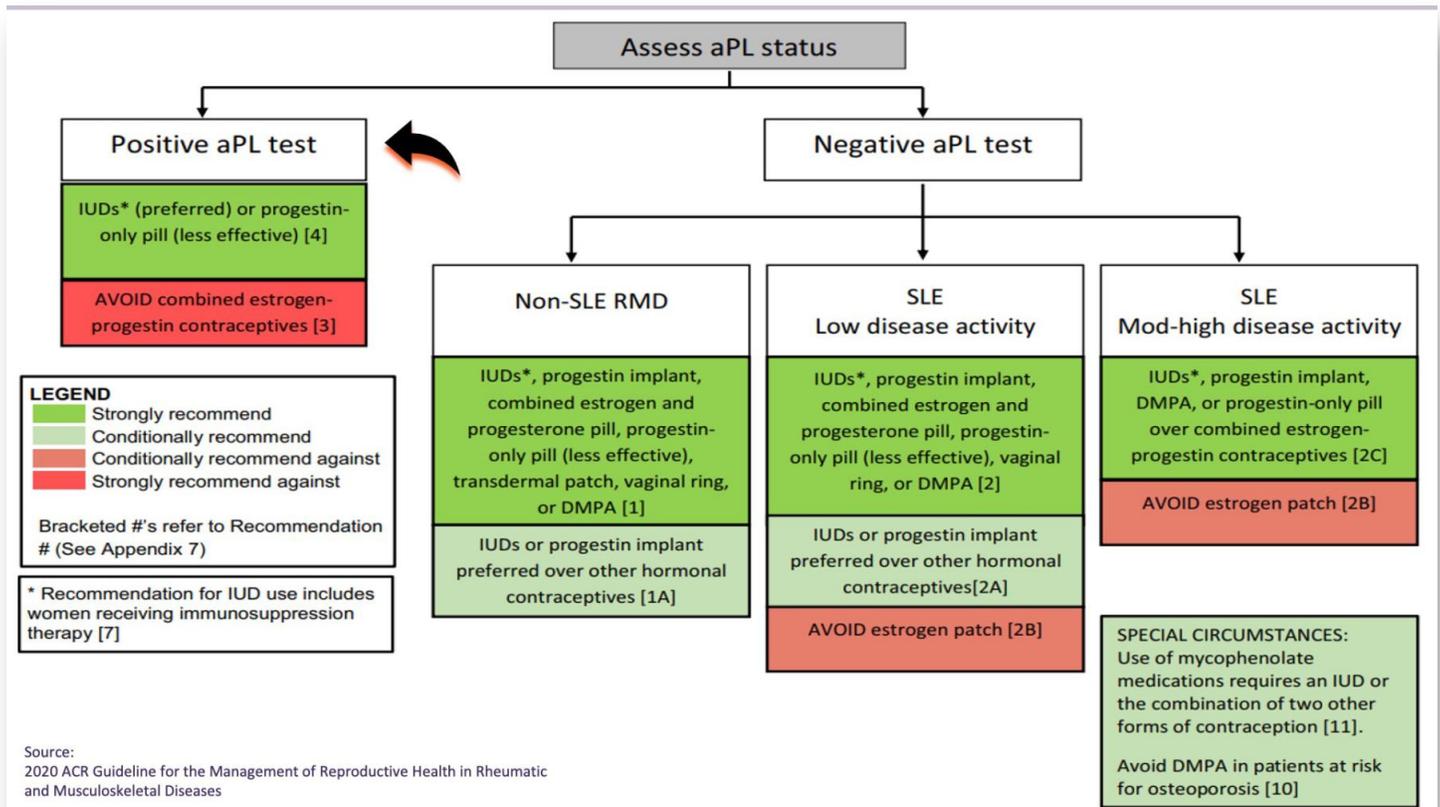
Systemic Lupus Erythematosus (SLE)

12

Notes

- ⓘ **Emphasize:** Clara has many options available to her since aPL's are negative.
- ⓘ Estrogen patch has higher levels of estrogen than COC's and thus should be avoided in patients with SLE
- ☰ **Read** through the contraceptive options in the green box, which are strongly recommended

If the aPLs Are Positive



Notes

Facilitator's Note: You are now going back to the flow chart to review further, and will look at what you would have done if Clara's test came back positive – share this with the audience

Click to the next slide, and the Positive aPL section will zoom in automatically

Say "What if Clara had positive antiphospholipid antibodies?"

If the aPLs Are Positive

What if she had positive aPLs?

Positive aPL test

IUDs* (preferred) or progestin-only pill (less effective) [4]

AVOID combined estrogen-progestin contraceptives [3]

If aPLs results are equivocal, refer to specialist

LEGEND

- Strongly recommend
- Conditionally recommend
- Conditionally recommend against
- Strongly recommend against

Bracketed #'s refer to Recommendation # (See Appendix 7)

IUD=Intrauterine device (hormonal or copper)
 RMD= Rheumatic and musculoskeletal disease
 DMPA= Depot medroxyprogesterone acetate "Depo" shot

Source:
 2020 ACR Guideline for the Management of Reproductive Health in Rheumatic and Musculoskeletal Diseases



Systemic Lupus Erythematosus (SLE)

14

Notes

- ⓘ **Emphasize:** The guidelines do not comment on new progestin implant in patients with positive aPL due to lack of data
- ⓘ The guidelines recommend IUDs as the preferred form of contraception, followed by progestin-only pills, although those are less effective
- ⓘ Avoid estrogen-containing contraception in these patients as estrogen increases risk of thromboembolism

Next Steps

Next steps.....

- aPL laboratory evaluation returns negative
- Clara decides she would like to try the Depot medroxyprogesterone acetate shots (DMPA) and you arrange for her to receive her first one in clinic
- You also recommend barrier contraception to help prevent sexually transmitted diseases



Notes

 **Read** slide as presented

Two Years Later



Two years pass.....

- She has not been following up with providers and has not been taking her SLE medications or DMPA for at least 1 year
- She has a positive pregnancy test at home
- She contacts her primary care provider's office

Notes

 **Read** slide as presented

 **Facilitator's Note:** DMPA: is the contraceptive injection, also known as "the shot"

Planning Lupus Pregnancies

Importance of planning lupus pregnancies

When lupus pregnancies are un-planned, there are risks of:

- **High lupus activity** at the time of conception
- Exposing the fetus to **medications that are not compatible** with pregnancy
- **Inappropriate discontinuation** of indicated pregnancy-compatible medications
- **Increased adverse** pregnancy outcomes
- **Increased adverse** neonatal outcomes

Notes

☰ **Read** slide as presented

⚠ **Emphasize** there are many risks when lupus pregnancies are un-planned

Taking Methotrexate Before Pregnancy

What if she had been taking her methotrexate when she became pregnant?

- Stop methotrexate
- Refer to Maternal Fetal Medicine (MFM) specialist
- Refer to <https://mothertobaby.org/> for reporting of exposure



Notes

- ☰ **Read** slide as presented
- ⚠ **Emphasize** the importance of stopping methotrexate if she becomes pregnant
- ⚠ Mothertobaby.org has resources for counseling her on the exposure and also tracks exposures and outcomes to collect data on medication exposures in pregnant patients

Drug Safety Overview

Drug Safety Overview: Pregnancy

Pregnancy Compatible	NOT Compatible with Pregnancy	Notes
Azathioprine	Belimumab	<i>Discuss discontinuation at conception</i>
Chloroquine	Cyclophosphamide	<i>Consider if life/organ threatening disease in 2nd or 3rd trimester</i>
Colchicine	Leflunomide	<i>Use cholestyramine washout until level is undetectable</i>
Cyclosporine	Methotrexate	<i>Stop 1 – 3 months before trying to conceive</i>
Hydroxychloroquine	Mycophenolate mofetil; Mycophenolic acid	<i>Discontinue 6 weeks before trying to conceive</i>
NSAIDs <i>[discontinue at 20 weeks]</i>	Rituximab	<i>Can be continued until conception; Consider if life/organ threatening disease in 2nd or 3rd trimester</i>
Prednisone <i>(<20 mg/day)</i>	Thalidomide Lenalidomide	<i>Stop 1 month before trying to conceive</i>
Sulfasalazine		
Tacrolimus		

Notes

 **Read** slide as presented

 **Facilitator's Note:** refer audience to accompanying handout with this information

Next Steps

Next steps in her pregnancy.....

- Review Clara's medication list for safety in pregnancy
- Re-start her HCQ
- Verify not taking methotrexate
- Prescribe a prenatal vitamin
- Obtain basic lab work: CBC with differential, CMP, Urinalysis
- Refer her to rheumatology



Notes

 **Read** case slide as presented

Pregnancy course.....

- Clara misses multiple scheduled visits
- She presents at 32 weeks to her obstetrician with headaches and leg swelling and 10 pounds weight gain in the last week.
 - Her blood pressure is 140/90
 - Urinalysis shows 3+ protein and 1+ blood
- Her OB is wondering if this is pre-eclampsia or lupus nephritis



Notes

 **Read** case slide as presented

Lupus Nephritis or Pre-eclampsia

Lupus Nephritis or Pre-eclampsia?

Overlapping features

- Edema
- Hypertension
- Headache/Mental status changes
- Proteinuria
- Increasing creatinine
- Thrombocytopenia

If you are concerned about any of these, be sure to involve: Rheumatology, Nephrology and Maternal Fetal Medicine

The hospital she is referred to should also have a Neonatal Intensive Care Unit (NICU)

Notes

☰ **Read** slide as presented

⚠ **Emphasize:** Lupus Nephritis and Pre-eclampsia have several overlapping features, and it can be confusing to distinguish between the two

⚠ If you are concerned about any of the features listed, be sure to involve other specialists

Hospital Course.....

- Clara is hospitalized for further work-up of possible lupus nephritis versus pre-eclampsia
- Multi-disciplinary care team of Nephrology, Rheumatology, and OBGYN, MFM, Neonatology weigh in



Notes

 **Read** slide as presented

Hospital Course

Hospital Course.....

- Clara is given corticosteroids to promote fetal lung maturation and undergoes emergency c-section delivery due to concerns about pre-eclampsia
- Clara delivers a small, preterm female infant who is admitted to the NICU
- Clara does well and is discharged after 48 hours



Notes

 **Read** slide as presented

Meanwhile the Baby...

Meanwhile the baby.....

- Clara's baby remains in the NICU for several weeks as she is weaned from oxygen. Her growth is monitored and feeding tube eventually removed
- Clara's baby is eventually transferred to a step-down unit where she is placed near a window
- The neonatologist caring for the baby observes a new skin finding



A new rash appears

Notes

- ☰ **Read** slide as presented
- ⚠ **Emphasize:** This skin rash (pictured) is classic for neonatal lupus
- ⚠ Sometimes that rash can be brought on by exposure to sunlight

Importance of Screening

Importance of screening for SSA and SSB antibodies:

- Clara **did not undergo preconception counseling**, SSA/Ro and SSB/La were never checked
- These antibodies should be checked in all women with autoimmune conditions prior to or during pregnancy to help counsel on the risks of **neonatal lupus**, Clara's were found to be positive after she delivered
- Women with SSA/Ro and/or SSB/La antibodies **should undergo serial fetal neonatal cardiac monitoring** during pregnancy to screen for fetal heart block
- **Hydroxychloroquine** may help prevent heart block and is a safe medication in pregnancy

Notes

- ⓘ **Emphasize:** Screening for SSA and SSB antibodies can help predict and discuss risks of developing neonatal lupus
- ⓘ Unfortunately, Clara did not receive serial fetal neonatal cardiac monitoring because she did not have the appropriate antibody checked before the time of delivery

Post-Partum course.....



- Clara is found to have SSA/Ro antibodies
- Her baby is diagnosed with neonatal lupus
- Baby's EKG and Echocardiogram are unremarkable
- Her baby is discharged home almost 2 months in the NICU
- The rash resolves at 6 months

Notes

 **Read** slide as presented

Post-Partum Course

Post-Partum course.....

- Clara restarts DMPA “Depo” shot for contraception post-partum
- Clara establishes care with a rheumatologist



Notes

 **Read** slide as presented

Several years later

Several years later.....

- Clara decides she **would like to have another child**. She is on DMPA for birth control.
- Lupus has been in **remission for the past year**
- Current **medications include**
 - Hydroxychloroquine (HCQ)
 - Prednisone 2.5mg
 - Mycophenolate mofetil



Notes

 **Read** slide as presented

Topics to Address

What are some initial important topics to address during your pre-conception counseling?

- **Improved maternal and pregnancy outcomes** when disease activity is low at least 6 months prior to conception
- **Medication** compatibility with pregnancy
- Factors that increase **pregnancy and fetal risks**

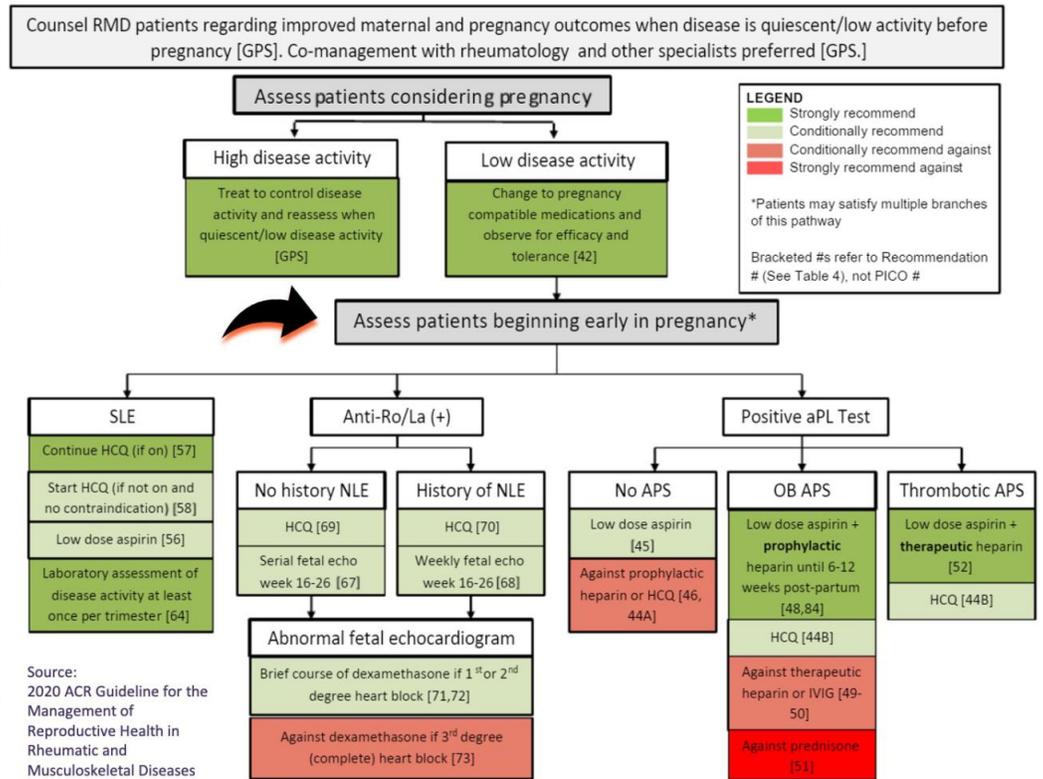
Notes

 **Read** slide as presented

 **Facilitator's Note:** refer audience to accompanying handout with this information

Counseling Rheumatic Disease

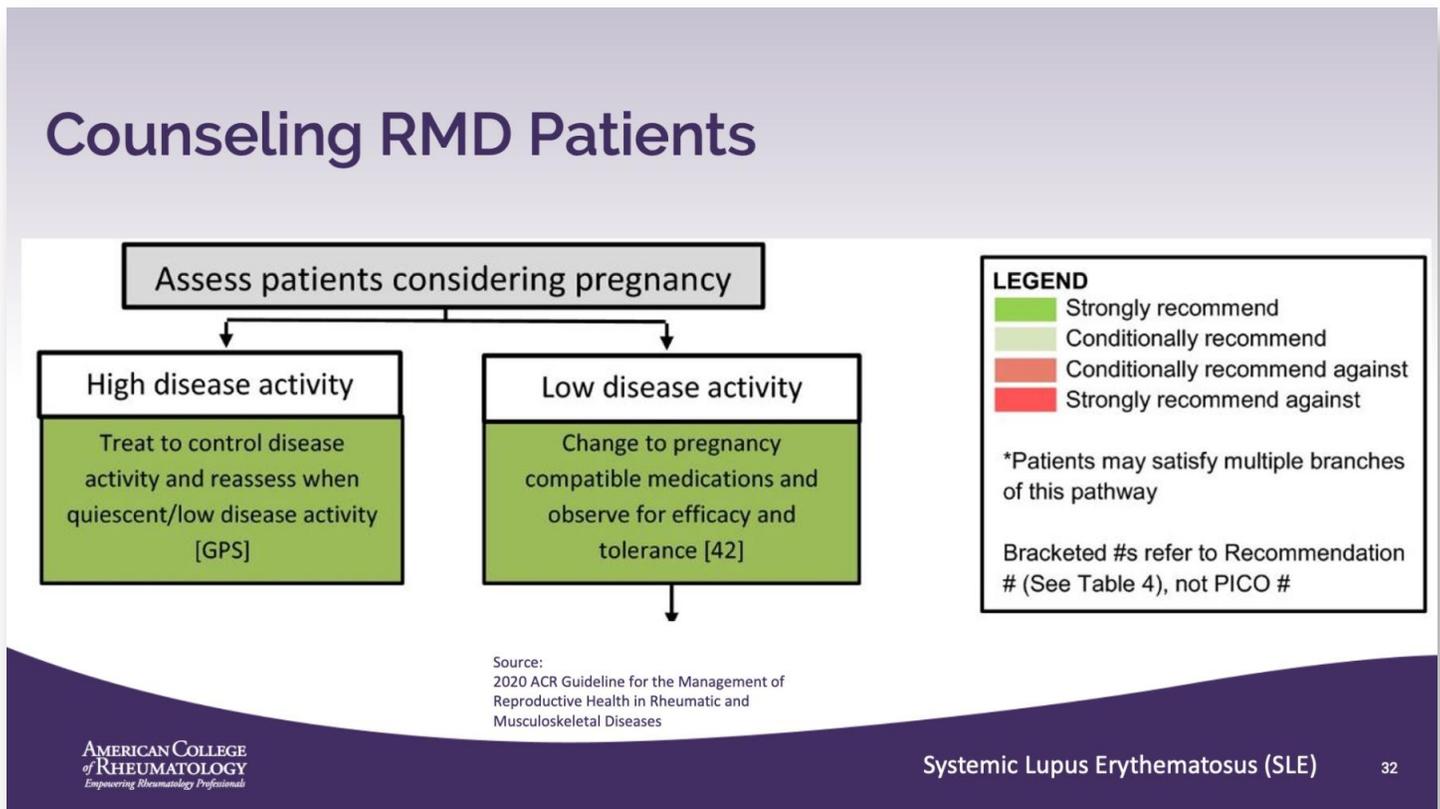
Counseling Rheumatic Disease (RMD) Patients



Notes

- 👁️ **Facilitator's Note:** This is a helpful flowchart to walk through when providing pre-conception counseling to RMD patients
- ⚠️ **Emphasize:** First, you'll want to emphasize patient's disease activity (high or low)
- 👁️ **Facilitator's Note:** Click to the next slide, and the Assess patients considering pregnancy part of the chart will appear

Counseling RMD Patients



Notes

- ⓘ **Emphasize:** Discuss with Clara and get her lab results to determine whether her disease activity is high or low, as that will determine the next steps

Next Step in Counseling

Next step in Pre-conception Counseling.....

- You review Clara's recent labs from her rheumatologist. They reveal normal kidney function, quiescent disease activity and normal urine studies.
- *What if Clara had evidence of kidney damage?*
 - Refer to a Nephrologist and MFM
- If a lupus patient has significant organ related damage, refer for consultation to specific organ related specialist before conception



Notes

 **Read** slide as presented

Pre-conception Medical Management

Pre-conception Medical Management

Transition patients to pregnancy compatible medications and observe for several months prior to conception

- For example, a patient on mycophenolate mofetil should be transitioned to azathioprine and/or tacrolimus and observed for several months before trying to conceive



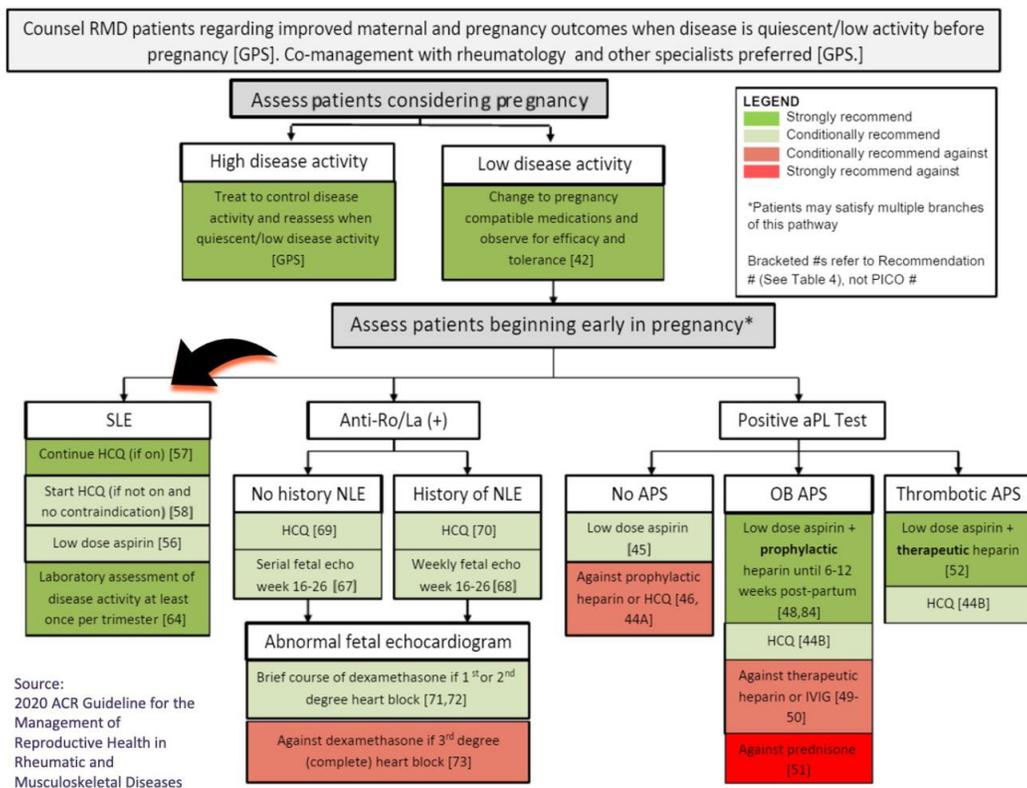
Notes

 **Read** slide as presented

 **Emphasize:** Remember, Clara is on mycophenolate mofetil, so she should be transitioned to azathioprine and/or tacrolimus, and observed for a couple months before trying to conceive

Counseling RMD Patients

Counseling RMD Patients



Notes

- 🗨️ **Emphasize:** Looking back to our flow chart, once the patient has achieved low disease activity on a pregnancy compatible regimen, and maintained low disease activity on that regimen, they can now attempt conception
- 🗨️ Patients may satisfy multiple branches of the next level of the flow chart
- 🗨️ If unknown: you would want to check the Ro/La antibody status, and the antiphospholipid antibody status
- 🗨️ And, because we know Clara has lupus, she satisfies the left-most branch here (SLE)
- 🗨️ **Facilitator's Note:** We will start by walking down the SLE branch of the flowchart to address her lupus - click to the next slide and the SLE branch will appear

Counseling RMD Patients

Counseling RMD Patients

SLE

Continue HCQ (if on) [57]

Start HCQ (if not on and no contraindication) [58]

Low dose aspirin [56]

Laboratory assessment of disease activity at least once per trimester [64]

LEGEND

- Strongly recommend
- Conditionally recommend
- Conditionally recommend against
- Strongly recommend against

*Patients may satisfy multiple branches of this pathway

Bracketed #s refer to Recommendation # (See Table 4), not PICO #

Source:
2020 ACR Guideline for the Management of Reproductive Health in Rheumatic and Musculoskeletal Diseases

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Systemic Lupus Erythematosus (SLE) 36

Notes

- ⓘ **Emphasize:** In patients with lupus who are undergoing pre-conception counseling, you want to make sure if they are on the hydroxychloroquine, they continue it throughout the pregnancy
- ⓘ Patients should also be started on a low-dose aspirin (either 81 mg or 100 mg) for pre-eclampsia prophylaxis

Importance of Hydroxychloroquine (HCQ)

- All pregnant SLE patients should **remain on hydroxychloroquine** unless contra-indicated
- Improves **maternal outcomes**
- Improves **infant outcomes**

Notes

 **Read** slide as presented

- ① **Emphasize:** This is a key learning point of this presentation—all pregnant lupus patients should remain on hydroxychloroquine throughout their pregnancy, unless contra-indicated (ex: a drug allergy)

Importance of Low Dose Aspirin (81 or 100mg)

- **Pre-eclampsia risk** is increased in women with SLE, particularly Black or African American women with SLE
- All pregnant women with SLE recommended to take daily low dose **aspirin to lower preeclampsia risk**
- Start at **12-16 weeks** gestation
- Continue **until delivery**

Notes

 **Read** slide as presented

 **Emphasize:** all pregnant women with lupus are recommended to take daily low dose aspirin to lower pre-eclampsia risk

Next Step in Counseling

Next step in Pre-conception Counseling

If you didn't have Clara's prior records, what additional labs would help to evaluate her pregnancy risks?

Antiphospholipid antibodies (aPLs)

- Anti-Cardiolipin IgG/IgM
- Anti-Beta-2-glycoprotein IgG/IgM
- Lupus anticoagulant also called DRVVT
- Anti-SSA/Ro and SSB/La



Notes

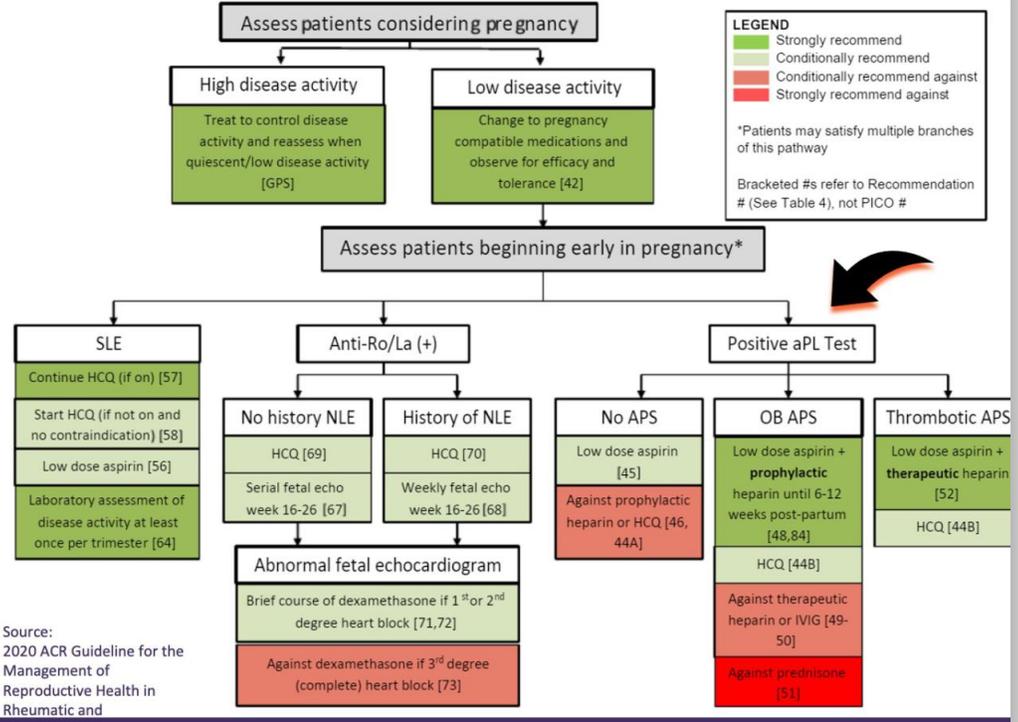
 **Read** slide as presented

Counseling RMD Patients

Counseling RMD Patients

- We know that Clara's aPL test was negative.
- However, if Clara's aPL test came back positive, what would you do?

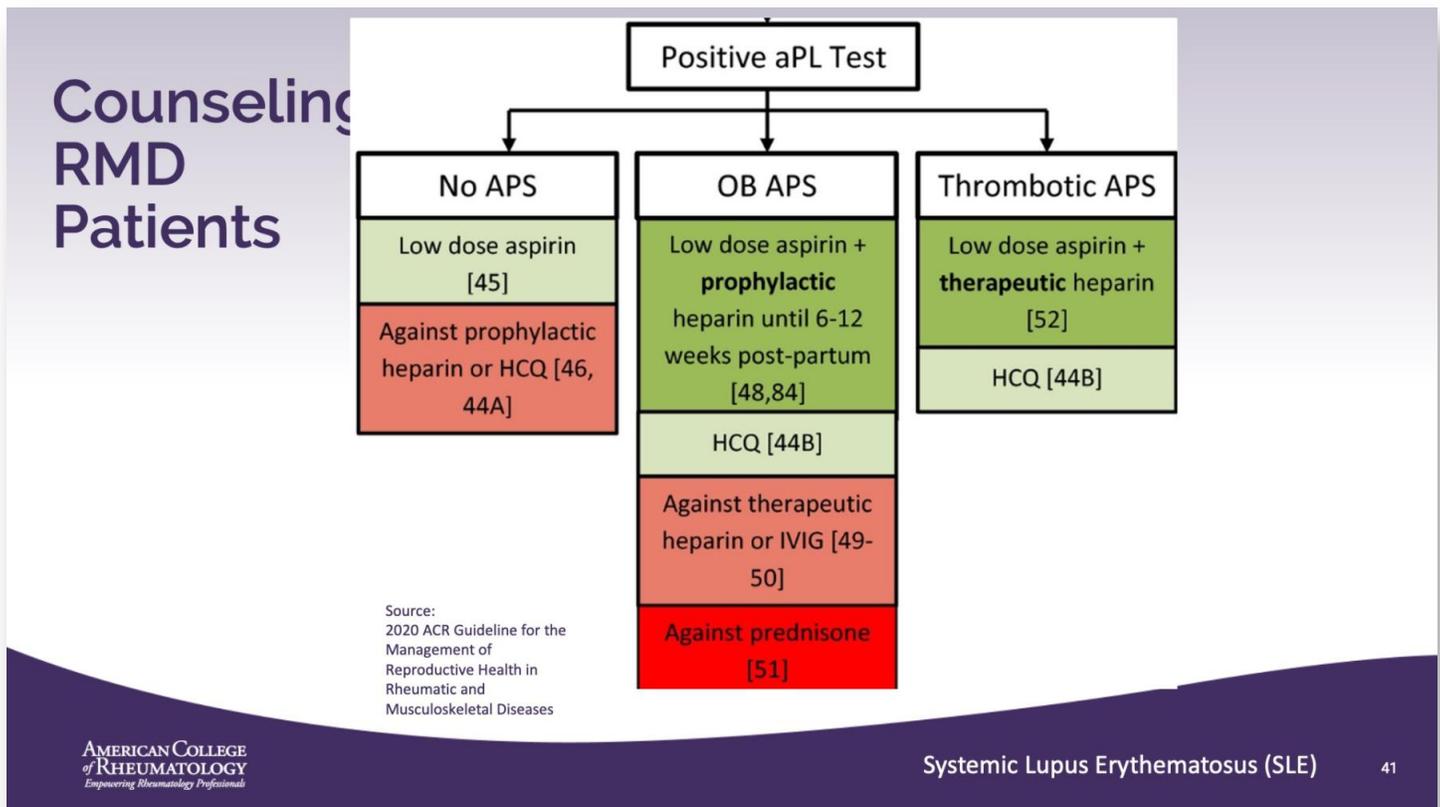
Counsel RMD patients regarding improved maternal and pregnancy outcomes when disease is quiescent/low activity before pregnancy [GPS]. Co-management with rheumatology and other specialists preferred [GPS.]



Notes

- ⓘ **Emphasize:** Looking at our flowchart again – we know Clara's antiphospholipid antibody test was negative—in her case we would NOT have to walk down the Positive aPL Test branch of the tree
- 👁️ **Facilitator's Note:** For the purpose of review, you are doing to discuss what you would do if her aPL test WAS positive—clicking to the next slide will bring you to the Positive aPL branch

Counseling RMD Patients



Notes

- ⚠ **Emphasize:** As a reminder, we know Clara's aPL is negative, but for the purpose of review, let's explore the Positive aPL test branch

For a patient with positive aPL, there are 3 scenarios:

- 1: the patient might have antiphospholipid antibodies, but they've never had an obstetric or thrombotic event and thus that patient would not be considered to have antiphospholipid syndrome (No APS)
- 2: the patient may have antiphospholipid antibodies and have had a qualifying obstetric event, thus meeting criteria for obstetric antiphospholipid syndrome (OB APS)
- 3: the patient who had antiphospholipid antibodies and has had a thrombotic event in the past, thus meeting criteria for thrombotic antiphospholipid syndrome (Thrombotic APS)

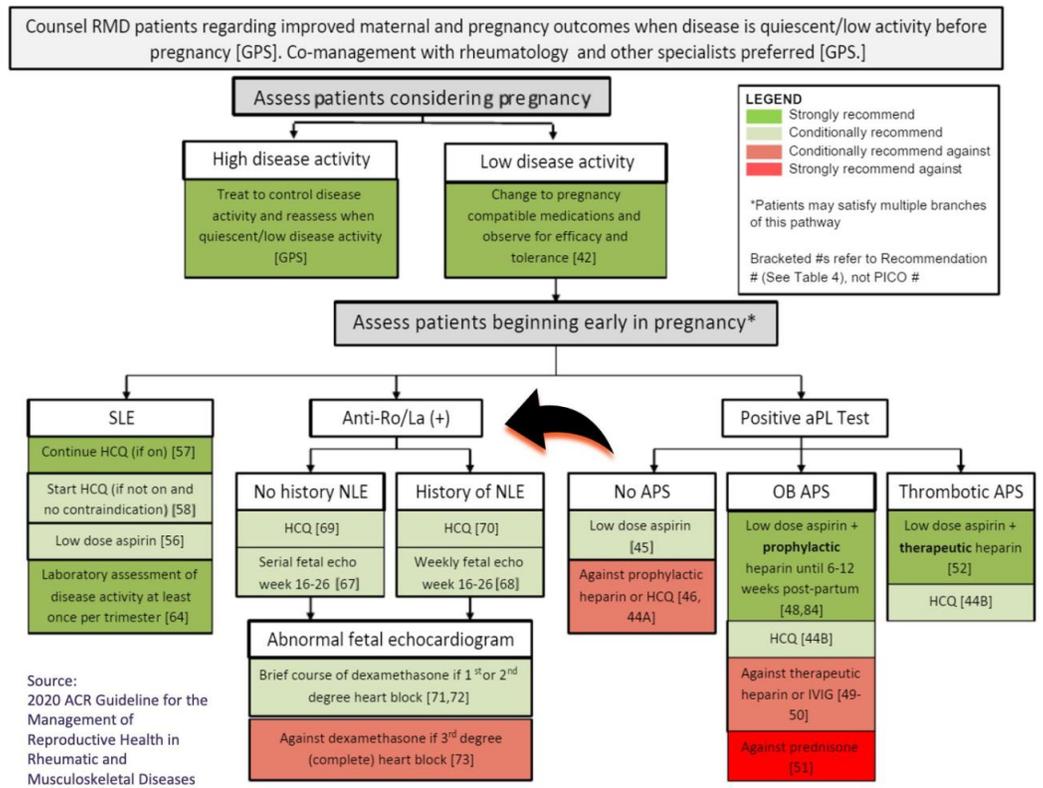
If any antiphospholipid antibody test is positive, refer to a specialist with expertise in this area.

- 🔍 **Facilitator's Note:** This discussion is beyond the scope of this presentation.

Counseling RMD Patients

Counseling RMD Patients

- Next, let's look at Anti-Ro/La
- We know that Clara's first baby had neonatal lupus (NLE)



Notes

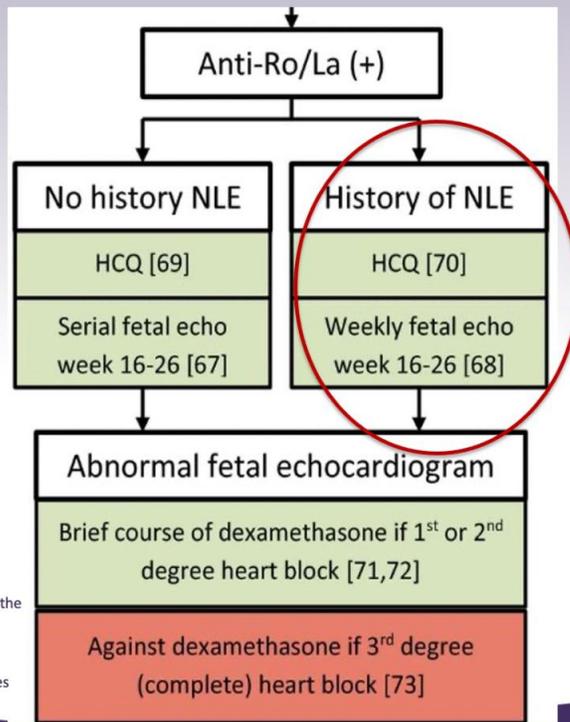
Say: Next, let's look at the Anti-Ro/La antibodies, the SSA/SSB antibodies, so we can figure out how best to counsel Clara

Facilitator's Note: Click to the next slide and the Anti-Ro/La branch of the tree will appear

Counseling RMD Patients

However Clara has a +SSA/Ro and her first child had neonatal lupus (NLE)

Source: 2020 ACR Guideline for the Management of Reproductive Health in Rheumatic and Musculoskeletal Diseases



Hydroxychloroquine may help prevent heart block from neonatal lupus and is recommended

Weekly fetal echocardiograms are recommended

LEGEND

- Strongly recommend
- Conditionally recommend
- Conditionally recommend against
- Strongly recommend against

*Patients may satisfy multiple branches of this pathway

Bracketed #'s refer to Recommendation # (See Table 4), not PICO #

Notes

- ⓘ **Emphasize:** We know that Clara’s first child had a history of neonatal lupus
- ⓘ She should be on hydroxychloroquine during her pregnancy, and weekly cardiac monitoring is recommended
- ☰ **Read** both categories/scenarios underneath Abnormal fetal echocardiogram as presented

Pre-conception Recommendations

Your Pre-conception Recommendations for Clara

- You recognize mycophenolate is not compatible with pregnancy
- You suggest she talk to her rheumatologist about her desires to become pregnant
- You reassure her that hydroxychloroquine and low dose prednisone are compatible with pregnancy
- You recommend she start ASA 81 mg daily at 12-16 weeks gestation for pre-eclampsia risk reduction



Notes

 **Read** slide as presented

Clara meets with her rheumatologist who....

- Stops her mycophenolate and starts azathioprine
- After 5 months on this new medication, her lupus remains inactive and together she and her doctor agree it is a good time to try to conceive
- Then stops her DMPA
- Since she has a +SSA/Ro and a child with neonatal lupus, she will need fetal cardiac monitoring in the second trimester during future pregnancies



Notes

 **Read** slide as presented

Second Pregnancy

Clara comes to clinic and is Pregnant for the Second Time.....

- She tells you she is “achy” and fatigued; she doesn’t know if this is “her Lupus acting up” or just the signs of her pregnancy
- You review she is taking azathioprine, HCQ, low dose prednisone
- Her SLE disease activity should be monitored at least once per trimester with clinical history, examination, and laboratory tests
- You recommend she continues to follow up with her rheumatologist



Notes

 **Read** slide as presented

Vaccines in Pregnancy

- **Pneumococcal , influenza (“flu”), Tdap, and hepatitis B** vaccines are recommended when indicated
- **COVID-19** vaccine is recommended in pregnant women and those with rheumatic diseases
- **MMR** vaccines should not be administered to pregnant women

Notes

- ⓘ **Emphasize:** Additionally, you'll want to make sure her vaccinations are updated during pregnancy
- 🗨️ **Read** slide as presented

Second Trimester

2nd Trimester.....

- At 14 weeks, she starts aspirin 81mg daily
- At 18 weeks, she begins routine fetal echocardiograms
- She regularly sees OBGYN, MFM, and Rheumatology
- She has no signs of active lupus or pre-eclampsia
- Clara continues on azathioprine, prednisone 2.5mg, and hydroxychloroquine throughout her pregnancy



Notes

 **Read** slide as presented

Breastfeeding

Clara tells you she would like to breastfeed and is wondering about the safety of her current medications.



Notes

 **Read** slide as presented

Drug Safety Overview: Breastfeeding

Compatible with Breastfeeding

Azathioprine *[low transfer]*

Belimumab
[expect minimal transfer but no available data]

Colchicine

Cyclosporine *[low transfer]*

Hydroxychloroquine/Chloroquine

NSAIDs *[Ibuprofen preferred]*

Prednisone *(delay 4 hours after a dose of >20 mg/day)*

Rituximab

Sulfasalazine

Tacrolimus *[low transfer]*

NOT Compatible with Breastfeeding

Cyclophosphamide

Leflunomide

Methotrexate

Mycophenolate mofetil

Mycophenolic acid

Thalidomide

Notes

⚠ **Emphasize:** The left side includes medications that ARE compatible with pregnancy, and the right side includes medications that are used in lupus, but are NOT compatible with pregnancy

🗨 **Read** slide as presented

Second Delivery

Clara delivers a healthy baby girl at 39 weeks

- Her lupus remained quiescent and she did not have signs of pre-eclampsia
- She and her baby are discharged home after 48 hours
- She continues post-partum on azathioprine, prednisone 2.5mg, and hydroxychloroquine, all medications compatible with breastfeeding



Notes

 **Read** slide as presented

Learning Points

Key Learning Points

- Drug safety
- Importance of HCQ and baby ASA
- When to refer



Notes

- ⓘ **Emphasize:** a key learning point is to understand medications compatible with pregnancy, and medications compatible with breastfeeding
- ⓘ A key learning point is to understand the importance of hydroxychloroquine and baby aspirin in pregnant patients with lupus
- ⓘ A key learning point is to know when to refer to a specialist

Pre-conception Checklist

Providers: Review this checklist when planning to discuss your patient's reproductive health plans, if they indicate a desire to become pregnant.



Lupus disease activity

- Establish care with a rheumatologist to assess disease activity
- Low lupus disease activity
- No flares within previous 6 months
- Consider evaluation by high-risk obstetrics/maternal fetal medicine
- Establish care with appropriate organ-specific specialist if needed



Pregnancy risk assessment

- Blood pressure evaluation
- Complete blood count
- Serum Creatinine
- Urine protein to creatinine ratio
- Liver Function Test
- Antiphospholipid Antibody testing
- SSA/Anti-Ro and SSB/Anti-La testing



Pregnancy medication safety

The below medications are compatible with pregnancy.

- Azathioprine
- Chloroquine
- Colchicine
- Cyclosporine
- Hydroxychloroquine
- NSAIDs (until 20 weeks)
- Prednisone, Methylprednisolone
- Rituximab up until conception
- Tacrolimus

If on other medications, need to discuss stopping or switching to medications that are compatible with pregnancy.

These educational materials were supported by a medical education grant from GlaxoSmithKline to address Systemic Lupus Erythematosus (SLE) and Reproductive Health education to support patients, educators, and clinical teams. Its contents are solely the responsibility of the authors and do not necessarily reflect the official views of GlaxoSmithKline.

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Drug Safety Overview: Pregnancy



Providers: Review the following lists of medications that are compatible with pregnancy, and those that are NOT compatible with pregnancy.



Pregnancy compatible

- Azathioprine
- Chloroquine
- Colchicine
- Cyclosporine
- Hydroxychloroquine
- NSAIDs (discontinue at 20 weeks)
- Prednisone (<20 mg/day)
- Sulfasalazine
- Tacrolimus



NOT compatible with pregnancy

MEDICATIONS

NOTES

Belimumab	Discuss discontinuation at conception
Cyclophosphamide	Consider if life/organ threatening disease in 2nd or 3rd trimester
Leflunomide	Use cholestyramine washout until level is undetectable
Methotrexate	Stop 1-3 months before trying to conceive
Mycophenolate mofetil; Mycophenolic acid	Discontinue 6 weeks before trying to conceive
Rituximab	Can be continued until conception; Consider if life/organ threatening disease in 2nd or 3rd trimester
Thalidomide; Lenalidomide	Stop 1 month before trying to conceive

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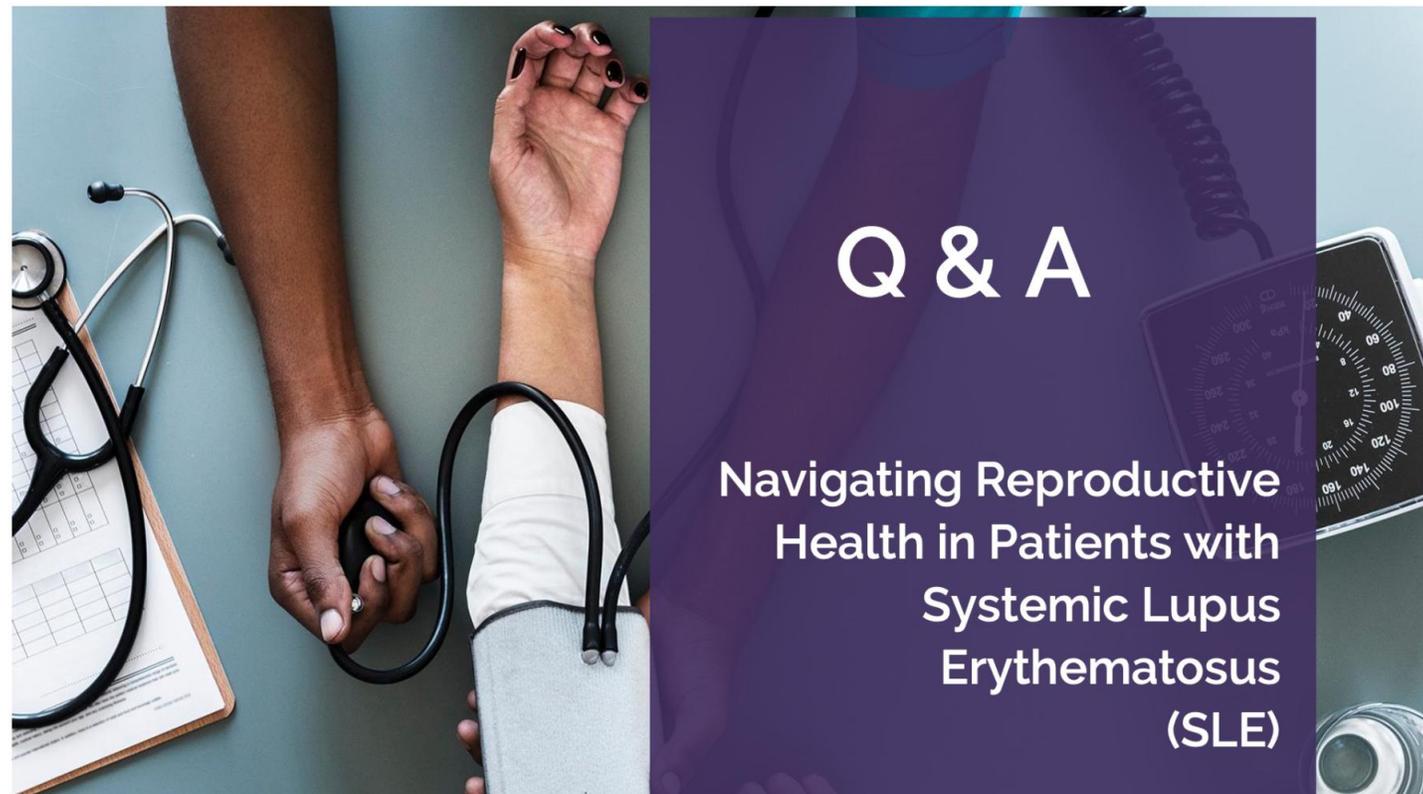
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Contact Information



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Thank You

Let us know what you learned!
Please remember to take your post-
test!

Collaborative Initiatives (COIN)
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Conclusions

- Thank participants for attending Navigating Reproductive Health in Patients with SLE
- Remind participants about the importance of their feedback and emphasize that they take the post-test assessment. Allow 10 minutes for the post-test to be completed.
- If you are comfortable, consider offering your contact information to participants in case they have questions after today's session.

