Akron Children's Hospital Clinical Pathways Disclaimer

Important Notice

Disclaimer

Akron Children's Hospital's clinical pathways are available for informational and guidance purposes only. Use of this site is subject to our Terms of Use, which are incorporated into this Disclaimer.

No Medical Advice

Clinical pathways contained on this website is for guidance purposes only and are not intended to be substitutes for professional medical advice, diagnosis, or treatment for any particular patient. Providers may need to adapt the pathways for a variety of reasons, including but not limited to, their professional judgment, unique patient clinical circumstances, and/or available resources. Patients should never rely on clinical pathways as a substitution for advice for your physician or other qualified health care provider, nor should you disregard professional medical advice or delay in seeking it because of something you have read on this website. This website does not recommend or endorse any specific tests, physicians, products, procedures, opinions, or other information that may be mentioned on the website. Reliance on any information provided by this website is solely at your own risk.

Emergency Situations

If you think you may have a medical emergency, call 911 immediately or proceed to the nearest emergency room.

Accuracy of Information

The clinical pathways are based on publicly available medical evidence and/or a consensus of medical practitioners at Akron Children's Hospital at the time of publication on our website. We do not make any guarantees about the information provided. The information and materials on this website are provided "as is" without any representations or warranties, express or implied.

No Liability

The materials on the Akron Children's site are provided, "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT.

IN NO EVENT SHALL AKRON CHILDREN'S HOSPITAL BE LIABLE FOR ANY DAMAGES WHATSOEVER, INCLUDING SPECIAL, INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES OR DAMAGES FOR LOSS OF PROFITS, REVENUE, USE, OR DATA WHETHER BROUGHT IN CONTRACT OR TORT, ARISING OUT OF OR CONNECTED WITH ANY AKRON CHILDREN'S HOSPITAL SITE OR THE USE, RELIANCE UPON OR PERFORMANCE OF ANY MATERIAL CONTAINED IN OR ACCESSED FROM ANY AKRON CHILDREN'S HOSPITAL SITE.

Changes to the Disclaimer

We reserve the right to amend this disclaimer at any time. Any changes will be posted on this page, and your use of the website after such changes have been made will constitute your acceptance of the revised disclaimer.

Screening for Fetal Heart Block in Patients with SSA/SSB Antibodies

Patients with Anti-SSA and Anti-SSB antibodies are at risk of delivering an infant with fetal heart block due to transplacental passage of antibodies that cause inflammation and scarring to the cardiac conduction system. Once 3rd degree heart block is diagnosed, it is irreversible and associated with significant morbidity and mortality risks. It has been historical practice to perform serial echocardiography on these patients to assess fetal PR interval to detect 1st or 2nd degree heart block, and if found, initiate steroid treatment to prevent progression to complete heart block. However, studies demonstrate that prolongation of the PR interval is rare, and many cases of complete heart block occur without a graded progression through 1st and 2nd degree block. Furthermore, studies have been inconclusive on the benefit of treatment with steroids and demonstrated potential risks.

These data led the Society of Maternal Fetal Medicine to release recommendations related to screening for heart block and possible interventions in March 2023, which were endorsed by the American College of Obstetricians and Gynecologists. SMFM states:

"The utility of screening for or treating heart block remains unproven because early-stage heart block does not predictably progress to more advanced heart block, and interventions have not been shown to prevent progression or improve outcomes. We recommend that steroids not be routinely used for the treatment of fetal heart block due to anti-SSA/SSB antibodies given their unproven benefit and the known risks for both the pregnant patient and fetus. Furthermore, given the lack of an effective intervention, and the criteria that screening tests are only useful if effective interventions exist, the rationale for screening for early-stage fetal heart block in patients with anti-SSA/SSB antibodies is uncertain. Accordingly, we recommend that serial fetal echocardiograms for assessment of the PR interval not be routinely performed in patients with anti- SSA or anti-SSB antibodies outside of a clinical trial setting."

The risk for complete heart block in a patient with SSA/SSB antibodies is approximately 2% and increases to 15-20% for women with a prior affected infant. In addition, studies demonstrate decreased recurrence risk of heart block with Plaquenil therapy in subsequent pregnancy.

Akron Childrens MFM has therefore developed the following consensus practice guideline:

1. **Patients with SSA/SSB antibodies who do not have a prior child affected by heart block**
    a. Patients will undergo MFM counseling on risks for neonatal lupus erythematosus and fetal heart block
    b. Patients will not be offered PR interval screening or steroids for prevention of fetal heart block.
    c. Recommend serial assessment of fetal heart rate by Doppler at least every 2 weeks between 16-28 weeks to detect complete heart block
2. **Patients with SSA/SSB antibodies AND a prior infant with heart block**
    a. Patients will undergo MFM counseling on risks for neonatal lupus erythematosus and fetal heart block
    b. Patients will be offered serial echocardiography for PR interval measurement weekly from 16-28 weeks.
    c. Plaquenil therapy is recommended starting as early as possible in pregnancy, ideally <10 weeks.

References:

1. Society for Maternal-Fetal Medicine (SMFM). Electronic address: pubs@smfm.org; Silver R, Craigo S, Porter F, Osmundson SS, Kuller JA, Norton ME. Society for Maternal-Fetal Medicine Consult Series #64: Systemic lupus erythematosus in pregnancy. Am J Obstet Gynecol. 2023 Mar;228(3):B41-B60. doi: 10.1016/j.ajog.2022.09.001. Epub 2022 Sep 6. PMID: 36084704.
2. Sammaritano, L.R., Bermas, B.L., Chakravarty, E.E., Chambers, C., Clowse, M.E.B., Lockshin, M.D., Marder, W., Guyatt, G., Branch, D.W., Buyon, J., Christopher-Stine, L., Crow-Hercher, R., Cush, J., Druzin, M., Kavanaugh, A., Laskin, C.A., Plante, L., Salmon, J., Simard, J., Somers, E.C., Steen, V., Tedeschi, S.K., Vinet, E., White, C.W., Yazdany, J., Barbhaiya, M., Bettendorf, B., Eudy, A., Jayatilleke, A., Shah, A.A., Sullivan, N., Tarter, L.L., Birru Talabi, M., Turgunbaev, M., Turner, A. and D'Anci, K.E. (2020), 2020 American College of Rheumatology Guideline for the

Management of Reproductive Health in Rheumatic and Musculoskeletal Diseases. Arthritis Rheumatol, 72: 529-556. https://doi.org/10.1002/art.41191