PREGNANCY WITH RHEUMATOID ARTHRITIS

DR. S. M. AKERKAR

Table of contents

- Before planning pregnancy
- What to expect during pregnancy?
- What to expect after pregnancy?
- What medications to take during pregnancy?
- What medications to take during feeding?
- I am a man, what precautions to take before planning to father a child?
- About the author
- Disclaimer & copyright information.

BEFORE YOU PLAN PREGNANCY-

Rheumatoid arthritis is an autoimmune disease affecting the joints. About 1% of the world's population is afflicted with Rheumatoid arthritis, women three times more often than men. In many, the disease starts early in life, in their 20s & 30s, just when marriage & family life is being planned.

So, if you have Rheumatoid arthritis & planning pregnancy, here is the complete guide, read on …

How do you know whether you are ready for pregnancy?

Your Rheumatoid Arthritis (RA) has to be fairly well controlled for 3-4 months before you start thinking about pregnancy. You should be well controlled on DMARDs alone without requiring steroids, NSAIDS on a regular basis. You should be able to perform your daily activities without much problem. If RA is well controlled & you plan pregnancy in consultation with your Rheumatologist, there is no reason why you should not have an enjoyable & successful pregnancy. You should also have a good support from family as you would have to cope with interrupted sleep, exertion, fatigue, weight gain, stress & anxiety that pregnancy & the newborn would bring.

Why does a pregnancy with RA require planning?

One is on multiple DMARDs (anti arthritis medicines like Methotrexate, Leflunomide, Hydroxychloroquine, Sulphasalazine) for RA. Rheumatologist's big guns like Methotrexate, Leflunomide are not compatible with pregnancy as they can affect the unborn baby. Hence, your Rheumatologist will have to slowly switch over from these medicines to pregnancy compatible DMARDs like Sulphasalazine & Hydroxychloroquine. This switch is not easy & takes time. One has to wait for Sulphasalazine or Hydroxychloroquine to have their full effect & the slowly withdraw Methotrexate while ensuring that there is no flare. There is also a washout period of months after stopping the incompatible DMARDs before pregnancy can be planned.

For a Rheumatologist, it is a tight walk between control of RA, minimizing chances of flare during pregnancy & avoiding any harm to the unborn baby. Once RA is well controlled with Sulphasalazine/ Hydroxychloroquine, one can go ahead with family planning.

SUCCESSFUL PREGNANCY WITH RA

© Dr. S. M. Akerkar http://www.arthritissupportboard.com/

Does Rheumatoid arthritis affect the chances of getting pregnant?

No. RA does not affect fertility in both genders. Unlike other autoimmune diseases like lupus, it does not affect the chances of you getting or staying pregnant. However, women with RA may take longer to conceive. Recently, Jawaheer & colleagues studied more than 48,000 pregnant women & found that 25 percent of women with rheumatoid arthritis had tried unsuccessfully for at least a year before they finally became pregnant, whereas only 16 percent of women without the disease had needed that much time.

Decreased sex drive & less frequent sex due to chronic pain are the likely causative factors. For men, decreased libido due to chronic pain & temporary reduction in the sperm count due to a flare may affect chances of pregnancy. Many studies have shown that women with RA have fewer children than other healthy women. However, this is more likely to be a choice to limit family size rather than any decreased fertility.

Does RA affect the baby?

No. RA does not affect the unborn baby. RA need not be inherited by the baby from the mother even if it is active during pregnancy. However, anti arthritis medicines may harm the unborn baby. Hence, pregnancy has to be planned in consultation with your Rheumatologist.

Does RA affect the pregnancy outcome?

There is no increase in the rate of miscarriage or stillbirth in patients with RA.

Prenatal care counts—

Apart from the planning & Rheumatologist's consultation, a healthy lifestyle & prenantal care will increase the chances of conception & reduce potential problems during pregnancy.

- Have a healthy diet.
- Walk & exercise on a daily basis.
- Keep your weight under control.
- Adopt a healthy lifestyle.
- Abstain from smoking/ alcohol.
- Avoid fish oils with high levels of mercury.
- Ensure that your diet is rich in vitamins.
- Good dental hygiene.

What to expect during your pregnancy with RA?

First Trimester:

First trimester may bring good news for quite a few RAers. RA tends to improve with pregnancy in the first trimester in almost 75% of patients. Those who experience improvement in the 1st trimester are very likely to continue with improvement through the next trimesters. The unlucky ones who do not improve, experience a flare, may require a short course of steroids.

It is difficult to predict who would improve with pregnancy. If you have a negative Rheumatoid factor & anti CCP antibody report; you are more likely to improve. Father's genetic contribution also plays a role. More genetically dissimilar that the baby is to its mother, more are the chances that the mother's RA will improve.

Second trimester:

A few RAers who have not improved in the first trimester may improve in the second trimester.

There are various theories to explain the improvement in RA due to pregnancy.

- Hormonal changes with pregnancy may be responsible for the improvement in RA.
- The unborn baby is foreign to the mother's body. Mother's immunity makes a few changes so that the fetus is not rejected as foreign. These changes could be responsible for improvement of RA.

Third trimester:

This does not generally have any change in the course of RA. One may experience more fatigue due to the weight gain.

Pregnancy discomforts similar to RA include-

1. Fatigue
2. Swelling of the feet/ ankles
3. Hand numbness/ tingling (due to carpal tunnel syndrome)

Do not panic in case any of these develop. They need not always

mean a flare. Consult your Rheumatologist.

Delivery:

Hip involvement due to RA may preclude normal vaginal delivery in a few RAers. A cesarean operation may be required in this case.

What to expect after pregnancy with RA?

Caring for the baby requires a great deal of energy & stamina on the part of the mother. Feeding multiple times in the night can add up to the fatigue & exhaustion. Carrying the baby around & feeding can be difficult if the hand joints, shoulders are inflamed.

- Sleep deprivation: happens to every Mom; however can add to the joint pain & fatigue if one has RA.
- Post partum depression: A chronic disease like RA with pregnancy can add to the post partum blues.
- Lactation & medicine: you will not be able to take methotrexate/ leflunomide to control RA activity when you are feeding.
- RA post partum flare: RA tends to flare up in most of the patients during the lactation phase. Your Rheumatologist would keep a close watch on the RA activity during this period & may prescribe short course of steroids in case of a flare.
- Hygiene & wound care after delivery is extremely important. You may be on steroids/ other DMARDs for control of RA. These medicines may impair immunity & make you prone to infections if appropriate care is not taken.

You will have to discuss these issues with your hubby & both need to share the responsibility so that you get adequate rest.

© Dr. S. M. Akerkar http://www.arthritissupportboard.com/

What medications can be taken during pregnancy?

NSAIDs: NSAIDs can affect the kidneys of the baby & also reduce the amniotic fluid in early pregnancy. Later in pregnancy, it can lead to premature closure of a structure in baby's heart called the ductus arteriosus & hence are better avoided. Non selective & selective COX-2 blockers have similar effects. In fact, they should be stopped at the start of the menstrual cycle when conception is being planned. They have been shown to affect the implantation of the blastocyst (earliest stage of fetus) in the uterus. Paracetamol may be used.

Steroids- one of the medicines used commonly if a pregnant woman has a flare of Rheumatoid Arthritis activity. They are considered relatively safe when used in low doses (< 20 mg of prednisone). Among the steroids, prednisone is used as it is converted in the placenta into inactive forms. Only about 10% of the maternal dose reaches the baby. Dexamethasones, Betamethasone are not used since they are not inactivated by the placenta.

However, steroids in general may increase the risk of diabetes (gestational), edema, blood pressure in the mother & premature rupture of the membranes. So your Rheumatologist would keep a watch on your blood pressure, sugars.

There is also a small risk of cleft palate in the baby with the use of steroids in the 1st trimester (1st three months). Cleft palate occurs at a rate of 1 in 1000 newborns in the population, prednisone would increase this risk to about 3 in 1000. Your Rheumatologist would weigh this risk against the risk of active disease.

Sulphasalazine (Azulfidine/ Saaz/ Sazo.)-- the risk of harming the unborn baby with Sulphasalazine is considered to be extremely low & most experts advise continuation of Sulphasalazine throughout pregnancy to control the RA activity. Folic acid supplements are recommended with sulphasalazine during pregnancy.

Hydroxychloroquine (Plaquenil/ HCQS/ Hydroquine)- Most studies with Hydroxychloroquine have found it safe during pregnancy.

Methotrexate (Rheumatrex/ Folitrax/ Oncotrex)—Methotrexate cannot be continued during pregnancy. It remains in the liver for 100–120 days. Hence, it should be stopped at least 3–4 months prior to conception to avoid potential risk to the unborn baby. You should be taking folic acid during this period and should continue taking it

thereafter.

Leflunomide (Leflunomide/ Arava)—Leflunomide cannot be taken during pregnancy. This drug remains in the system for as long as 3 years. If you are on Leflunomide and plan to conceive, you need a wash out therapy. The same includes a drug called cholestyramine to be taken for 11 days to wash out leflunomide from the body. Blood levels are recommended after cholestyramine to ensure complete wash-out. You should plan pregnancy 3 months after the wash out therapy.

Anti-TNF alpha medications (Remicade/ Enbrel)--
Presently, we do not have sufficient data to conclude regarding the safety of anti-TNF alpha medications to the unborn child.

There is a database maintained by OTIS (Organization of Teratology Information Specialists) that follows pregnant women exposed to biologic agents. The database has followed up 32 pregnant women exposed to biologic agents (Anti-TNF alpha medications) during the first trimester. The follow up does not reveal any major risk of structural defects associated with Anti-TNF alpha medications.

Spanish registry for adverse events of biological therapies in rheumatic diseases (BIOADASER) has followed up 14 pregnancies in patients on anti TNF alpha agents.

British Society for Rheumatology Biologics Register has also reported 35 pregnancies. Both the reports have not shown any increased risk of structural defects in the fetus with these agents.

YASER M. ALI & colleagues analysed the available data on the safety of TNF-blockers in pregnancy. They analysed the data from multiple registries of Rheumatoid Arthritis as well as inflammatory bowel disease, & the various case reports.

The study showed that cases of fetal anomalies with TNF-α blockers are rare. The incidence is much lower than the 3% rate of fetal anomalies seen in general population.

Though these studies have not found any major structural risks, it is very premature to consider these agents during pregnancy.

What medicines can I use while feeding?

Methotrexate—Methotreaxte is not safe during lactation.

Leflunomide—Leflunomide is not safe during lactation.

Hydroxychloroquine—Hydroxychloroquine is found in the breast milk in very minor quantity. The baby may be exposed to about 2% of the maternal dose. Most experts therefore, continue hydroxychloroquine during nursing.

Sulphasalazine—sulphasalzine can be taken during nursing. However, a case of bloody diarrhea has been reported in a baby while the mother was on sulphasalazine.

Prednisone—may be taken in small doses. Less than 5% of the maternal dose of Prednisosne reaches the breast milk. Studies have shown that levels in milk are less than 0.1% of the total dose taken by the mother & this is less than 10% of the steroids produced by the infant's own self. To minimise the risk & if the dose of Prednisone is higher than 20 mg, it is better to pump & discard the breast milk till 4 hours following the oral dose.

NSAIDs—may be used during nursing. However, they do have a small risk of causing jaundice in the newborn. American Academy of Pediatrics (AAP) considers ibuprofen, indomethacin, diclofenac, naproxen, piroxicam, ketorolac and tolmetin to be compatible with breastfeeding.

TNF—alpha blockers (Remicade/ Enbrel): There is not much data regarding the safety of these agents during breast feeding. Hence, breast feeding should probably be avoided while on these medicines. Infliximab is a large protein molecule, making it unlikely to be present in significant amount in the breast milk. Additionally, it is not well absorbed from the gut. Thus it is unlikely to affect the breast fed child. However, no conclusive data is presently available in this regard.

I am a man, what precautions do I need to take?
Can I continue my anti-arthritis drugs while planning to start a family?

Methotrexate: Men should stop Methotrexate at least 1 month prior to planning pregnancy.

Sulphasalazine: Sulphasalazine may decrease the sperm count & motility. However, this is reversible & the counts/ motility return to normal by 2 months.

Leflunomide: Men should stop Leflunomide prior to planning pregnancy.

© Dr. S. M. Akerkar http://www.arthritissupportboard.com/

A checklist before you plan pregnancy:

- Is your RA well controlled?
- Have you spoken to your Rheumatologist?
- Are you mentally prepared for the change in DMARDs/ biologics & any possible RA flare due to this?
- Have you spoken to your hubby? You should be taking him along for all the Rheumatologist consultations so that he is a part of the decision making process & knows what to expect.
- Do you have support from the in laws/ family members?
- If not, have you thought about a maid to help you manage the baby?

Pregnancy with RA is definitely possible if you adhere to this checklist & consult your Rheumatologist from time to time. All the very best!

References:

Damini Jawaheer, Jin Liang Zhu, Ellen A. Nohr, Jørn Olsen. Time to pregnancy among women with rheumatoid arthritis. Online first http://onlinelibrary.wiley.com/doi/10.1002/art.30327/abstract

Ostenson M et al Pregnancy and reproduction in autoimmune rheumatic diseases Rheumatology. 2011;50(4):657-664

Ali YM & colleagues Can tumor necrosis factor inhibitors be safely used in pregnancy? J Rheumatol. 2010 Jan;37(1):9-17.

http://www.otispregnancy.org/otis_study_ra.asp

Katz JA, Antoni C, Keenan GF, et al. Outcome of pregnancy in women receiving infliximab for the treatment of Crohn's disease and rheumatoid arthritis. Am J Gastroenterol 2004; 99: 2385-2392

American Academy of Pediatrics Committee on Drugs: Transfer of drugs and other chemicals into human milk. *Pediatrics* 108, 776–789 (2001).

Van der Horst-Bruinsma IE, de Vries RR, de Buck PD, van Schendel PW, Breedveld FC, Schreuder GM, et al. Influence of HLA-class II incompatibility between mother and fetus on the development and course of rheumatoid arthritis of the mother. *Ann Rheum Dis*. May 1998;57(5):286-90

Temprano KK, Bandlamudi R, Moore TL. Antirheumatic drugs in pregnancy and lactation. *Semin Arthritis Rheum*. Oct 2005;35(2):112-21

Park-Wyllie L, Mazzotta P, Pastuszak A, Moretti ME, Beique L, Hunnisett L, et al. Birth defects after maternal exposure to corticosteroids: prospective cohort study and meta-analysis of epidemiological studies. *Teratology*. Dec 2000;62(6):385-92.

Vermillion ST, Scardo JA, Lashus AG, Wiles HB. The effect of indomethacin tocolysis on fetal ductus arteriosus constriction with advancing gestational age. *Am J Obstet Gynecol*. Aug 1997;177(2):256-9; discussion 259-61.

Brent RL. Teratogen update: reproductive risks of leflunomide (Arava); a pyrimidine synthesis inhibitor: counseling women taking leflunomide before or during pregnancy and men taking leflunomide who are contemplating fathering a child. *Teratology*. Feb 2001;63(2):106-12.

Costedoat-Chalumeau N, Amoura Z, Duhaut P, Huong DL, Sebbough D, Wechsler B, et al. Safety of hydroxychloroquine in pregnant patients with connective tissue diseases: a study of one hundred thirty-three cases compared with a control group. *Arthritis Rheum*. Nov 2003;48(11):3207-11.

© Dr. S. M. Akerkar http://www.arthritissupportboard.com/

About the author

Dr. S. M. Akerkar is a Consultant Rheumatologist at Mumbai Arthritis Clinic & Research Centre, Mumbai, India.

He was formerly faculty at the prestigious Seth GS Medical College, Mumai, India.

Apart from clinical practice, empowering the patient with useful information has been his passion. The author's mission is to increase the awareness about rheumatology & arthritis among medical professionals as well the general public.

He runs the site www.arthritissupportboard.com & the blog http://doctorakerkar.wordpress.com/ for patient education.

Copyright information

All rights Reserved.

Copyright © 2011 by Dr. S. M. Akerkar

All rights reserved. No part of this work may be used or reproduced in any manner whatsoever without written permission, except in the case of brief quotations embodied in critical articles and reviews.

This ebook is developed for patient education & empowerment. Keeping this objective in mind, it is available for download free of cost. You may share it with anybody or circulate it, only in its complete form. Do not host it on your site without prior permission of the author.

Disclaimer

Every effort has been made to make this ebook as complete and accurate as possible. However, medical information keeps changing with scientific advances.

The purpose of this e-book is to educate & empower the patient. The author does not warrant that the information contained in this e-book is fully complete and shall not be responsible for any errors or omissions. The author shall have neither liability nor responsibility to any person or entity with respect to any loss or damage caused or alleged to be caused directly or indirectly by this e-book.

This ebook is not a substitute for a medical consultation. Always speak to your Doctor/ Rheumatologist before taking any decision.