Menstruation

Menstruation is the most common trigger in female patients with Familial Mediterranean Fever. Additional factors such as emotional or physical stress, cold exposure may also induce the attacks. Patients who menstruate at a younger age of onset have a higher frequency of developing peritonitis, endometriosis, and adenomyosis.

It is reported that approximately 15% of female patients with FMF experience peri-menstrual flares. Patients may also have flares between periods due to hormonal shifts of the menstruation cycle.

Increase of colchicine dose, specifically during the peri-menstrual period or use of oral contraceptives have proven beneficial in preventing these FMF hormonally-triggered flares associated with menstruation.

What should I do in case of a severe attack during pregnancy?

In case of a severe abdominal flare, please DO NOT take any risks to your baby and contact your doctor immediately. Should the flare occur outside of the doctor's office hours or at the weekend, go to your nearest hospital. There are medications that can be administered to stop the pain and prevent disease-driven pregnancy termination.

Breastfeeding

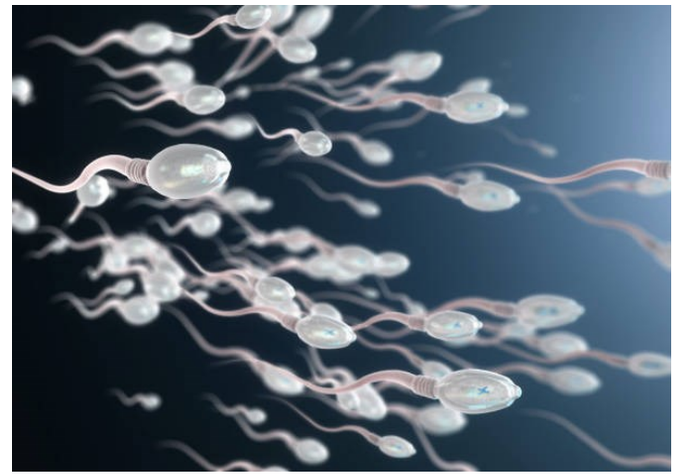
Breastfeeding while taking colchicine is safe. There have been no adverse reported outcomes in colchicine-exposed breastfed infants.

Is amniocentesis necessary on colchicine?

Treatment with colchicine during pregnancy will not affect the outcome of the pregnancy. Therefore, there is no justification for recommending amniocentesis due to the patients use of colchicine.

Colchicine and male fertility

Usually, there is no need for men to stop colchicine prior to conception. In the rare case of azoospermia or oligospermia, proven to be related to colchicine, it can be temporarily paused and be substituted with an anti-IL-1 treatment to improve sperm functionality. Colchicine should be resumed after successful conception. The cause of azoospermia should always be evaluated since it may be due to amyloidosis of the testes.



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The brochure has been reviewed and endorsed by PD Dr. Juergen Rech, Senior Physician and Head of the Autoinflammation Clinic, University of Erlangen, Germany.

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Familial Mediterranean Fever &
Autoinflammatory Diseases

PREGNANCY & MENSTRUATION

Autoinflammatory diseases

Autoinflammatory diseases, also called Periodic Fever Syndromes, are a group of inherited disorders caused by genetic abnormalities and overactivity of the innate immune system, resulting in episodes of spontaneous inflammation affecting multiple organs. Patients having recurrent flares with fever, inflammation of the serous membranes, and arthritis, may experience long-term complications of the disease such as infertility/subfertility due to the uncontrolled inflammation.

Planning a family

Are you thinking about having a baby? If you have a family history that includes autoinflammatory disease, be aware that children may inherit these conditions. Learning more about these diseases prior to conception, will give parents time to address concerns with their genetic counselor. Family health history of both parents is essential when seeking genetic testing.

Fertility/Infertility

Infertility/subfertility is a complication of autoinflammatory diseases. In the case of Familial Mediterranean Fever (FMF), women with early-onset disease and non-responders to colchicine are risk factors for FMF-associated infertility. Effective therapeutic intervention improves the prognosis of successful conception and increases reproductive ability.

Disease during pregnancy

Pregnancy in autoinflammatory disease patients is variable, as some women may enjoy a flare-free period while others may experience severe and frequent flares. Patients with pregnancy-induced remission, often resume flaring during the early post-partum period.

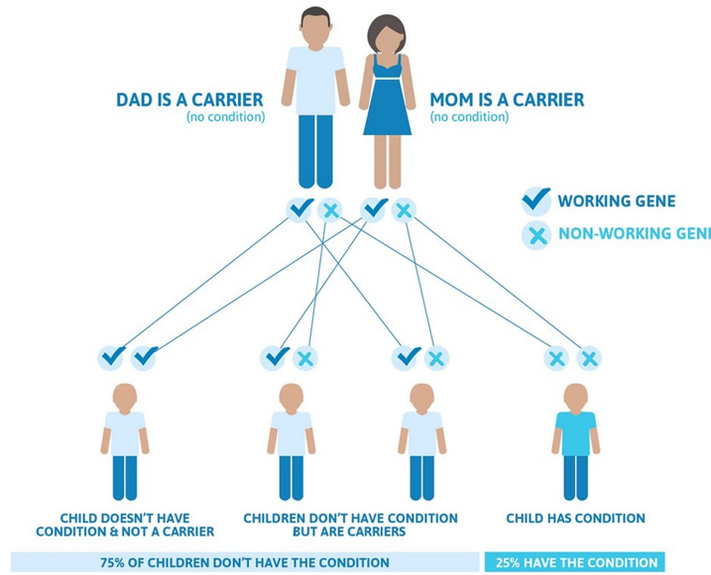
Genetic inheritance

Familial Mediterranean Fever is usually inherited in an autosomal recessive manner meaning to be affected an individual typically must have a mutation in both copies of the responsible gene inherited. The parents of an affected person carry one mutated copy of the gene and are referred to as a carriers. Carriers are typically not symptomatic of FMF. When two carriers of an autosomal recessive condition have children, each child has a:
25% chance to have the condition
50% chance to be a carrier like each of the parents
25% chance to not have the condition and not be a carrier

Additionally, medical literature has documented the existence of heterozygosity inheritance in the MEFV gene, of which transmission is likely more complex than previously known. This is due to partial penetrance/hereditary factors expressing in heterozygous subjects.

Collectively, it is recommended that individuals from MEFV-carrier families seek pre-pregnancy genetic counseling.
As many as 1 in 5 people of Sephardic Jewish, Armenian, Arab and Turkish heritage are carriers of FMF.

Autosomal Recessive Inheritance Pattern



https://healthjade.com/familial-mediterranean-fever/

Newborn screening

Newborn hospital screening is not yet available for autoinflammatory diseases.

Biologic treatment: Interleukin-1-blocking inhibitors

Pregnant women with autoinflammatory diseases must maintain their treatment throughout their pregnancy to suppress inflammation and avoid flare-ups. Pregnancy complications such as preeclampsia, preterm birth, and fetal growth restriction are often associated with inflammation. Doctors may be concerned that their autoinflammatory patients use of anti-IL-1 during pregnancy may be a risk factor.
Women who are on interleukin-1 inhibitors, anakinra and canakinumab, should know that despite limited data, there have been little associated adverse maternal or fetal outcomes due to both medications usage during pregnancy. There is a growing body of evidence emerging with regards to the safety of biologic agents during both conception and pregnancy. The research suggests that IL-1 blockage during pregnancy appears to be safe and beneficial for both mother and baby.
However, it is important for women to discuss with their doctor, the risk-benefit assessment of remaining on an anti-IL-1 biologic throughout their pregnancy. A majority of patients cannot stop treatment, as it would put them into a flare, which may be a potential risk to both mother & baby.

Some physicians prefer to have pregnant patients switch from canakinumab to anakinra as there is more medical data on anakinra use during pregnancy. This is not a feasible option for most women due to drug intolerability formerly using anakinra.
In FMF patients, there is an elevated rate of spontaneous abortion in untreated patients. Pregnant women should carefully weigh the risks, discuss their options with their treating physician, and take the best decision for them and their baby.

Genetic testing

Patients and their partners who are planning to become pregnant can benefit from autoinflammatory genetic testing. While some patients may test genetically negative, and have no variants found, a diagnosis of uSAID (undefined systemic autoinflammatory disease) can be diagnosed based on their clinical symptoms. Approximately 25% of FMF patients do not carry known MEFV mutations and 60% of other AID patients carry no known mutations.
While genetic testing is available in most countries, it can be prohibitively expensive and slow. There are several specialized labs offering affordable and direct genetic testing to patients worldwide.