

CROHN'S DISEASE AND PREGNANCY

Inheritance

Familial disorder, although doesn't follow a classic Mendelian genetic disease.

5% chance for a child of a mother or father with Crohn's disease.

37% if both parents are sick.

Fertility

Terminal ileitis or colitis decreases fertility due to:

- Inflammation or scarring of adjacent organs: fallopian tubes or ovaries.
- Adhesions.
- Dyspareunia (perianal disease).
- Fear.
- Malnutrition.
- Sulfasalazine (reduces sperm count and motility).

Effect of Crohn's on pregnancy

If a woman is doing well and is in remission, the pregnancy should proceed smoothly.

Active disease is likely to proceed during pregnancy.

Inactive IBD – risk for stillbirth, abortion or congenital anomalies is not greater than general population.

IBD doesn't affect maternal pregnancy related complications.

Effect of Pregnancy on Crohn's

The activity of IBD at conception is the primary predictor of the course of pregnancy.

Clinical course of de novo diagnosis of Crohn's disease during pregnancy is unpredictable.

Unwanted pregnancy associated with 38% increase in disease activity compared to 12% in planned pregnancies.

Previous pregnancies are not a good indicator.

Better course when mother and child have different alleles in HLA-DR, DQ.

Childbearing history may predict a better outcome.

Clinical Assessment

Differential diagnosis of abdominal pain in pregnancy:

- GERD
- Cholelithiasis
- Pancreatitis
- Toxemia
- Pregnancy related
- Normal changes in bowel habits.

A patient might feel well despite on-going disease activity as determined by CRP, colonoscopy or GI series.

Diagnosis to rely more on clinical symptoms and less laboratory (Hb ↓, Alb ↓, ESR ↑)
 Sonography and magnetic resonance are safe, X-ray is not, and should be used according to clinical necessity (complications).

Sigmoidoscopy – harmless, Colonoscopy – necessitates fetal monitoring as might induce labor.

Medical Therapy

Active disease and not therapy poses the greatest risk to pregnancy.

Goals: Establishing remissions before pregnancy, maintaining remission during pregnancy.

Safety of IBD medications during pregnancy		
Safe when indicated	Limited data	Contraindicated
Mesalamine (oral,topical)	Olsalazine	Methotrexate
Sulfasalazine	Azathioprine	Thalidomide
Corticosteroids	6-Mercaptopurine	Diphenoxylate
TPN	Cyclosporine	
Loperamide	Metronidazole ¹	
	Ciprofloxacin ¹	
	Infliximab	
¹ safe after the first trimester		

Delivery

Basically an obstetric decision.

Active perianal Crohn’s disease may be exacerbated by vaginal delivery.

18% of Crohn’s disease patients without previous perineal disease develop such after vaginal delivery usually after extensive episiotomy.

Surgery

Elective – uncommon.

Safest – at the second trimester.

Indications identical to nonpregnant:

- obstruction
- perforation
- abscess
- bleeding

Continued maternal illness poses greater risk to the fetus than surgical intervention.

What is best for the mother is ultimately best for the fetus.

Surgical procedures: subtotal colectomy ± ileostomy, hemicolectomy, segmental resections.

Primary anastomosis carries a greater risk of postoperative complications, and thus temporary ileostomy is generally preferred.

If fetus is mature, cesarean section and bowel resection should be done simultaneously.

Conclusions:

- Fertility is affected by active Crohn's Disease.
- Adverse fetal outcomes are not increased when IBD is quiescent.
- Active disease at conception, increases the risk of adverse fetal outcome.
- Most medications for IBD are safe during pregnancy, with notable exceptions.
- Active disease is unusual, more deleterious than maintaining medical therapy.

References:

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