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Fertility

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# Pregnancy and Inflammatory Bowel Disease Fertility

- 1 in 7 couples with no past medical history of IBD experience sub-fertility issues
- Most people with IBD have normal fertility
- Chron's disease and some forms of treatment/surgery do reduce fertility

**→** Planning a pregnancy

#### Do IBD treatments affect fertility?

- Most of the drugs are safe and do not affect fertility
- Only a few can adversely affect the baby

It is important that you consult your doctor before stopping or changing any of your medication to prevent a flare up of your IBD, particularly as fertility is reduced by active disease.

#### Planning a pregnancy

#### Diet

- Balanced and varied diet
- Calcium and vitamin D supplements
- Vitamin B12 to prevent anaemia if terminal ilem has been removed.
- Iron deficiency
- Folic acid supplementation
- Folic acid may need to be increase if on sulphasalazine

#### **→** Planning a pregnancy

#### **Excercise**

#### **Smoking**

- Low birthweight with a higher risk of miscarriage.
- The risk is even greater for women with IBD as smoking increases the activity of Crohn's and increases the need for surgery and medication.
- May also reduce the severity of UC disease activity, but still not recommended

#### **Alcohol**

 Best to avoid alcohol, particularly during the first three months because of the risk of miscarriage.

Pregnancy course

#### Maintaining remission: key answer

- If conception occurs at a time of quiescent disease the risk of relapse is the same as in non-pregnant women .
- If conception occurs at a time of active disease, two thirds have persistent activity and of these two thirds deteriorate.
- Both clinical activity and surgical interventions decline with pregnancy and parity.
- Risk for preterm delivery and low birth weight increases if disease is not well controlled

#### Pregnancy course

Will pregnancy make my Ulcerative Colitis or Crohn's Disease worse?

- Pregnancy has little effect on either UC or Crohn's.
- About one third of women will have a relapse while they are pregnant.
- This is similar to non-pregnant women with IBD over that period of time.
- A relapse it is more likely to be in the first three months.
- Relapses decreased in the years following pregnancy

> Pregnancy course

#### Investigations for UC or Crohn's during pregnancy.

- Needed in case of flare-ups
- Generally flexible sigmoidoscopy, rectal biopsy, ultrasound, MRI, endoscopy and colonoscopy can be carried out during pregnancy.
- Investigations which involve x-rays and radiation should normally be avoided by pregnant women unless absolutely essential. This includes CT scans.

> Pregnancy course

#### Surgery in pregnancy.

 Indications for surgery in pregnant women with Crohn's disease are the same as for nonpregnant patients: obstruction, perforation, haemorrhage and abscess.

 In the severely ill patient, continued illness is a greater risk to the fetus than surgical intervention

- >Treatment and safety issues
- Aminosalicylates: Sulphasalazine (Salazopyrin), Mesalazine (Asacol)
- Corticosteroids
- Methotrexate (MTX)
- Infliximab (Remicade) and Adalimumab (Hurmira)
- Azathioprine (Imuran) & 6-mercaptopurine (Purinethol)
- Cyclosporin
- Antibiotics
- Biologics Anti-TNFα antibodies
- Anti-diarrhoeals
- Anti-spasmodics

>Treatment and safety issues

Aminosalicylates: Sulphasalazine (Salazopyrin), Mesalazine (Asacol)

- Thought to be safe as have been used for long term.
- Very little transfer of these drugs across the placenta to the baby.
- Can be used as maintenance therapy and during a flare-up.
- ➤ If you are taking sulphasalazine you are advised to take folic acid supplements. Mesalazine is safe in doses less than 3g a day.
- Sulphasalazine reduces fertility in men, but this is usually temporary and is reversible within 2 -3 months of stopping the medication

>Treatment and safety issues

#### **Corticosteroids**

- Safe to use
- All routes are safe
- 90% metabolised through the placenta
- Theoretical risk of cleft palate was a study done on rabbits using high doses

>Treatment and safety issues

#### **Methotrexate (MTX)**

- Contraindicated in women trying to conceive, due to risk of birth defects being a folate antagonist.
- Couples should avoid conception if either of them had MTX in the past 3-12 months.

>Treatment and safety issues

Infliximab (Remicade) and Adalimumab (Hurmira)

- Relatively new drugs. Experience and literature is limited.
- Work by attenuating the immune process and are used in severe cases of Crohn's Disease, especially when other therapies have failed.
- Contraindicated in couples trying to conceive.
- A reliable form of contraception should be used for at least 6 months after receiving infliximab or adalimumab.

>Treatment and safety issues

Azathioprine (Imuran) & 6-mercaptopurine (Purinethol)

- Immunosuppresant type of drugs
- Main stay of treatment in IBD
- Still relatively little known about the effects of these drugs on women with IBD during pregnancy
- Growing evidence regarding their safety and recommended that if disease is controlled to continue treatment

#### >Treatment and safety issues

## Cyclosporin

- Very strong immunosuppressant drug which has a significant rate of serious side effects
- It has not been associated with any harm to an unborn baby
- Risks of this treatment are to the mother and include liver, kidney and neurological problems
- Only suggested in very severe (acute) colitis which did not respond to steroids

#### >Treatment and safety issues

#### **Antibiotics**

#### Metronidazole

Safe to be used in pregnancy

#### Ciprofloxacin

- Contraindicated in pregnancy
- Two studies in which the majority of patients had treatment in the first trimester, failed to show any increased risk of malformation, spontaneous abortion, prematurity, or low birth weight

#### **Tetracyclines and Sulphonamides**

- Should be avoided during pregnancy
- Tetracyclines can interfere with fetal skeletal development and cause discoloured teeth
- Sulphonamides interfere with folic acid metabolism and are teratogenic in animals, which develop cleft palate and have high mortality

>Treatment and safety issues

#### Biologics - Anti-TNFα antibodies Infliximab (Remicade)

- Relatively new drugs that affect the immune system
- 2<sup>nd</sup> line agents that are used when other drugs have failed
- Treatment should be avoided in pregnancy or planning a pregnancy
- Contraception should be used for 6 months after treatment
- Over 100 women reported to be on the drug before getting pregnant or whilst pregnancy had a healthy pregnancy
- Evidence is limited: so best avoided if possible

>Treatment and safety issues

#### **Antidiarrhoeals**

#### Diphenoxylate (Lomotil) and Loperamide (Imodium)

Use is not recommended due to lack of data on their safety profile

#### **Cholestyramine** (Questran)

Bile salt drug which can be used to treat diarrhoea associated with surgery for Chron's Disease.

Safe to be used in pregnancy

>Treatment and safety issues

# **Antispasmodics**

#### Hyoscine butylbromide (Buscopan)

- Can be used after 1<sup>st</sup> trimester for shortest possible period
- Considered as safe to use

#### **≻** Delivery

## What type of delivery should I have?

- Patients with uncomplicated Crohn's disease without perianal disease or rectal involvement can deliver vaginally
- An ileoanal pouch is regarded as an indication for caesarean section

Colostomy or ileostomy patients can deliver vaginally

**≻**Post-partum

## **Breastfeeding**

- Important to develop a healthy immune system
- May reduce the risk of a baby developing IBD later on in life
- Few drugs are licensed and marketed as safe to be used in breast feeding.
- No trials in breastfeeding mothers
- Methotrexate, cyclosporin, some antibiotics and the antidiarrhoeals, loperamide and diphenoxylate are contraindicated.

#### **≻**Post-partum

#### What are the chances of my child having IBD?

- Parents with IBD are slightly more likely to have a child who develops IBD.
- If one parent has the disease, the chances of a child developing IBD at some point in their life is around 5%.
- This risk seems to be slightly higher with Crohn's than UC.
- If both parents have IBD the risk can increase to 35%.