



INFORMATION SHEET

FERTILITY AND IBD

INTRODUCTION

Crohn's Disease and Ulcerative Colitis (the two main forms of Inflammatory Bowel Disease – IBD) are often first diagnosed in people in their 20s and 30s. This is also the age at which many couples are thinking of having children. If you or your partner have IBD and are thinking of starting a family, you may be concerned about how IBD might affect your fertility. This information sheet looks at the main ways in which Ulcerative Colitis (UC) or Crohn's Disease, or the treatments for these conditions, may sometimes have an effect on fertility.

We also have an information sheet **Pregnancy and IBD**, which covers concerns you may have about IBD once you have conceived.

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HOW MIGHT HAVING IBD AFFECT MY FERTILITY?

If you are a woman...

Research suggests that most women who have inactive IBD - either Crohn's or UC - should have no more difficulty in becoming pregnant than women without IBD.

However, some women with active IBD, especially those with Crohn's Disease, may have problems, particularly if they are underweight and eating poorly.

Severe inflammation in the small intestine, as caused by Crohn's Disease, can sometimes affect the normal functioning of the ovaries. A small number of research studies have found that women with active Crohn's may have lower levels of a hormone associated with 'ovarian reserve' (egg cells capable of being fertilised), especially if they are over 30. IBD inflammation can also cause adhesions (bands of scar tissue) that affect the fallopian tubes.

Some IBD related complications such as abscesses and fistulas in the anal region may make you less interested in sex and so less likely to conceive for that reason. Severe fatigue, abdominal pain, diarrhoea, and body-image worries can have a similar effect.

With this in mind, guidelines in this area usually recommend talking to your doctor and your IBD team at an early stage - and, if possible, getting your IBD and its symptoms under control before you try to become pregnant.

Being in remission when you conceive may also help to make it more likely that your IBD remains in remission, and that you go on to have a normal, uncomplicated pregnancy. That said, many women have had uneventful and successful pregnancies even when they have conceived during an active phase of their IBD. (See **Pregnancy and IBD** for more information about keeping well while pregnant.)

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I did have concerns that having Crohn's would make it harder to conceive, but I did become pregnant and now have a five month old son.

”

Cari, age 34

Mother to one child, diagnosed with Crohn's Disease in 2007

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At one point, I considered not having any children as I was worried that having Crohn’s would affect my baby. I am so pleased we decided to though, as we are now parents to two healthy children.

”

Debbie, age 31
Mother to two children, diagnosed with Crohn’s Disease in 2002

If you are a man...

In general, male fertility is not affected by IBD. A few studies have suggested that sperm quality may be affected by Crohn’s Disease, but it is not clear whether this is more likely to be the effect of poor nourishment. Treatment of the disease should restore fertility to its usual level.

However, for men as well as women, problems such as fatigue and a poor body image can affect sexual relationships and make it more difficult to conceive a child. Abscesses and fistulas in the pelvis and anal regions may also cause some difficulties with erection and ejaculation.



CAN SURGERY FOR IBD AFFECT MY FERTILITY?

Surgery for women

Research has shown that ileal pouch–anal anastomosis surgery (also known as IPAA or pouch surgery), often carried out for UC, can reduce fertility in women. This is probably because the surgery has caused adhesions and scarring of the fallopian tubes. This may be less likely to happen with a colectomy and the formation of an ileostomy (an alternative operation for UC). There is also some evidence that a laparoscopic approach (keyhole surgery) may cause fewer adhesions. (For more information on types of surgery for IBD, see our **Surgery for UC** and **Surgery for Crohn’s Disease** leaflets.)

However, any pelvic surgery, including some operations for Crohn’s Disease, could lead to fertility issues if it affects the fallopian tubes. So, whichever condition you have, if you are considering surgery for IBD and want to get pregnant, do discuss this possibility with your IBD team. You may also find it helpful to talk to a fertility specialist.

Surgery for men

Very rarely, men who have had an IPAA (pouch) operation, or have had their colon and rectum removed by surgery, may have sexual dysfunction (problems with erections or ejaculation). This type of problem is often temporary or can be successfully treated with medication. Again, you may want to discuss this possibility with your doctor before having surgery.



HOW DO IBD DRUG TREATMENTS AFFECT FERTILITY?

The majority of drug treatments for IBD do not appear to affect fertility and are also considered safe in pregnancy. However, there are some exceptions, as shown below.

If you are trying to start a family, or if you are already pregnant, do discuss this and your drug treatment with your doctor or IBD team.

It is better to avoid flare-ups while trying to conceive and while pregnant, so most doctors will recommend continuing with your medication unless there are clear reasons not to. If the drugs you are on are not thought to be completely safe, there is usually a good alternative.

For more information on the drugs mentioned, see our individual drug treatment leaflets.



SPECIFIC DRUG TREATMENTS THAT MAY AFFECT FERTILITY OR CONCEPTION

- **Sulphasalazine** (Salazopyrin), a 5-ASA medication commonly used for IBD, is known to reduce fertility in men. This effect is usually temporary and fertility should return to normal levels within two to three months of stopping the medication. Alternatives to sulphasalazine that can be used instead include mesalazine, olsalazine and balsalazide. These have the same action on the colon but do not affect fertility.

Sulphasalazine has not been shown to affect fertility in women.

- **Methotrexate**, an immunosuppressive drug sometimes prescribed for IBD, can increase the risk of birth defects or miscarriages if taken by women at conception or during pregnancy. It may also affect the formation of sperm, so men as well as women are advised not to conceive while on methotrexate. Traces of methotrexate can remain in the body tissues for some time and couples are usually advised to avoid pregnancy for at least 3-6 months after stopping methotrexate.
- **Mycophenolate Mofetil**, another immunosuppressant, may cause miscarriages or birth defects if used during pregnancy. Women being treated with this drug are advised to stop taking it at least 6 weeks before conception.
- The immunosuppressive drugs **azathioprine** and **mercaptopurine** (6MP) have not been shown to affect fertility. A small number of studies have suggested that conceiving a child with a man taking these drugs might carry an increased risk of miscarriage or birth defects, and some doctors have advised men planning to father a child to switch to other medications. However, more recent research has not replicated these findings.

Most doctors now recommend continuing with azathioprine or mercaptopurine rather than risking an IBD flare-up. Similar advice is usually given to women taking azathioprine or mercaptopurine.

- **Infliximab** (Remicade) and **Adalimumab** (Humira) are often known as 'biologics' or 'anti-TNF drugs', and are increasingly used for moderate to severe IBD.

Research is ongoing into the possible effects of these drugs on fertility and pregnancy. A recent review looking at birth outcomes across a number of studies concluded that it was still too early to say that these drugs are absolutely safe during pregnancy. However, there is a growing body of evidence that they are low risk and compatible for use during conception.

A few studies have shown that infliximab may affect sperm motility (movement), but it is not clear whether this actually reduces male fertility.

Currently, because of the lack of clear evidence, the manufacturers of infliximab and adalimumab recommend caution and the use of contraception to avoid pregnancy. However, many doctors consider that if the anti-TNF treatment is keeping the IBD in check, it may be better to continue with it during pregnancy, at least for the first six months.

Guidelines suggest that doctors should talk through the possible risks and benefits of taking infliximab or adalimumab with each patient on an individual basis. So, if you are on anti-TNFs and are pregnant or thinking about getting pregnant, do speak to your IBD specialist.

If you do decide to stop anti-TNF medication before conception, you will need to wait at least 6 months after the last treatment to be certain the drug has left your system.

For more information about using these and other medications in pregnancy, see our information sheet **Pregnancy and IBD**.



CAN I IMPROVE MY FERTILITY?

For women, it helps if you can get your IBD under control for at least 3 months before trying to conceive.

As your fertility may be being affected by factors other than your IBD, you may also find it helpful to follow some of the suggestions and tips usually given to couples wishing to conceive a child.

For example:

- Don't smoke. Research has shown that even passive smoking may reduce fertility in women, and that women who smoke while pregnant are more likely to have a miscarriage. Smoking has also been linked to poorer quality sperm.
 - Avoid, or at least cut down on drinking alcohol. Alcohol can pass through the placenta and seriously affect the development of the baby, especially during the early stages of pregnancy. The Department of Health now recommends avoiding all alcohol if you are trying to conceive or are pregnant. NICE (the National Institute for Health and Care Excellence) also advises giving up alcohol for at least the first three months of pregnancy because of the increased risk of miscarriage.
- Drinking excessive alcohol can affect sperm quality, so men are also recommended to keep their drinking within safe limits (not more than 3-4 units a day.)
- Try to eat a healthy and balanced diet. If this is difficult because of your IBD, you could talk to your doctor about taking supplements to ensure you get all the nutrients you need. Zinc and vitamin B6 are particularly important for fertility in both men and women. (See our booklet **Food and IBD** for more information on healthy eating for people with UC or Crohn's.)
 - If you are a woman, ask your doctor about folic acid supplements. Extra folic acid (also known as vitamin B9) can help reduce the risk of neural tube birth defects such as spina bifida. The usual recommendation is for all women to start taking at least 400 micrograms of folic acid a day as soon as they start trying to conceive, and then to continue with this for the first 12 weeks of the pregnancy.

Inflammation in the small intestine and some IBD drugs can affect how well you absorb the folic acid. So if you are on sulphasalazine, or have Crohn's Disease in the small intestine or had part of your small intestine removed, you may need a higher level of folic acid, for example up to 5mg a day. Check with your doctor what level of folic acid would suit you.

- A lack of vitamin B12 can also affect fertility and increase the risk of your baby developing birth defects. It is particularly important to have enough B12 if you are taking extra folic acid, so ask your doctor to check your vitamin B12 levels too.
- Take exercise. Regular moderate exercise of about 30 minutes a day can help by maximising your fitness and keeping your weight in check.
- Men can also help their sperm develop properly by keeping their testicles cooler than the rest of the body. Tight underwear, hot baths and hot showers can all raise the temperature of the testicles and slow sperm production.



“ To help my fertility, I took folic acid. I also tried to eat a healthy and well-balanced diet, and avoided alcohol.

— Cari, age 34
Mother to one child, diagnosed with Crohn's Disease in 2007



SEX

It can help to know that a woman is most likely to get pregnant if she has sex within a day or so of ovulation (when the egg is released from the ovaries). This usually happens about 14 days after the first day of her last period. There are now temperature charts and ovulation testing kits that can help tell you when this is happening.

However, fertility experts suggest that the best way to get pregnant is probably to have an active sex life throughout the month, rather than trying to time sex around ovulation. Worrying about the right time to have sex can be very stressful. It might even lead to having less sex overall and so actually reduce the chances of a successful pregnancy.

WHAT IF I STILL CAN'T GET PREGNANT?

If you have been trying to have a baby without success for some time (for more than 18 months if you are under 35 or more than 6 months if you are over 35) you can ask to be referred to a fertility clinic.

It may be nothing to do with your IBD. Many couples without IBD have problems with fertility. Some estimates suggest about one in seven of all couples trying to have a child cannot conceive without help. So, if you wish to have a child but there is a problem, you should not necessarily assume that your IBD is the cause.

Occasionally, women with IBD may find it harder to be accepted for fertility investigations and treatment, and it may be helpful if your gastroenterologist can liaise with your gynaecologist about the likely effects of your condition on your fertility.

If you feel worried that the two specialist departments are not fully aware of each other's views, then it may be worth making an appointment to discuss these concerns with your IBD nurse (if you have one), or whichever doctor you feel more comfortable with.

HELP AND SUPPORT FROM CROHN'S AND COLITIS UK

We produce a wide range of information sheets and booklets, including **Pregnancy and IBD**. All are available free from our office and can also be downloaded from our website: www.crohnsandcolitis.org.uk.

Crohn's and Colitis UK Information Line: 0300 222 5700. Open Monday to Friday, 9 am to 5 pm, except Thursday open 9 am to 1 pm, and excluding English bank holidays. An answer phone and call back service operates outside these hours. You can also contact the service by email info@crohnsandcolitis.org.uk or letter (addressed to our St Albans office). Trained Information Officers provide callers with clear and balanced information on a wide range of issues relating to IBD.

Crohn's and Colitis Support: 0121 7379 931: Open Monday to Friday, 1 pm to 3.30 pm and 6.30 pm to 9 pm, excluding English bank holidays. This is a confidential, supportive listening service provided by trained volunteers and available to anyone affected by IBD. These volunteers are skilled in providing emotional support to anyone who needs a safe place to talk about living with IBD.

OTHER SOURCES OF INFORMATION AND SUPPORT

NHS Choices Pregnancy and Baby Guide

Website: <http://www.nhs.uk/conditions/pregnancy-and-baby/pages/pregnancy-and-baby-care.aspx>

Helpful information on a wide range of fertility and pregnancy issues.

Infertility Network UK

Charter House, 43 St Leonard's Road, Bexhill-on-Sea, East Sussex TN40 1JA
0800 008 7464

Website: www.infertilitynetworkuk.com

Provides information and support on fertility problems.

IA

The Ileostomy and Internal Pouch Support Group

Peveill House, 1-5 Mill Road, Ballyclare, Co Antrim BT39 9DR

0800 018 4724 or 028 9334 4043

Website: www.iasupport.org

Colostomy Association

2 London Court, East Street

Reading RG1 4QL

Helpline - Freephone 0800 328 4257

Website: www.colostomyassociation.org.uk

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ABOUT CROHN'S & COLITIS UK

We are a **national** charity established in 1979. Our aim is to improve life for anyone affected by Inflammatory Bowel Diseases. We have over 28,000 members and 50 local groups throughout the UK. Membership costs start from £15 per year with concessionary rates for anyone experiencing financial hardship or on a low income.

This publication is available free of charge, but we would not be able to do this without our supporters and members. Please consider making a donation or becoming a member of Crohn's and Colitis UK. To find out how call **01727 734465** or visit www.crohnsandcolitis.org.uk

