

# MEDICATIONS

This section describes the medications used in IBD, how they work, when they are used and their more common and important side-effects. The list of side-effects is not all inclusive. If you think one of your medications is causing a side-effect, consult your doctor. It is important not to treat yourself. This section does not discuss any non-drug therapies such as dietary changes, surgery or psychological support.

Many medications are used to treat IBD. The main aims are:

- to suppress inflammation in those with active disease
- to prevent flare-ups in those with inactive disease

Medications may also be used to control symptoms such as pain or diarrhoea.

Dietary supplementation may also be used to replace or supplement essential nutrients which are poorly absorbed because of extensive disease or surgery.

As the cause of IBD is not known, the medications cannot be precisely targeted and even the "specific" medications used to suppress inflammation or prevent flare-ups have a wide range of effects, some beneficial and some not. The advantages of medications are that by bringing the inflammation under control they can relieve the symptoms of IBD and some can reduce the chances that complications can develop. In some cases by controlling the inflammation it gives the bowel an opportunity to heal. All treatments used in medicine (medications, surgery, radiation) have risks. Every time a doctor prescribes a medication in a person with IBD, the risks of the medication must be weighed against the risks of continuing or worsening symptoms and also the development of complications if the medication is not used.

It is best not to be alarmed by the long list of possible side effects with some medications as most side effects are uncommon and are fully reversible with cessation of the medication. Generally, prior to starting on a new medication, the potential benefits and risks of any therapy will be fully considered by you and your doctor/clinical team.

Your clinical team will work out a treatment plan based on your own individual circumstances at a given time. It is quite common for people with IBD to require a combination of medications to achieve the best result. As IBD is a chronic condition many people will need to take medications for long periods of time. Stopping your medications can result in a flare-up of symptoms so always consult with your doctor before stopping medication even if you feel well.

The medications are given in a number of ways depending on the location and severity of disease; as tablets or capsules, by intravenous or intramuscular injection, or as enemas, rectal foam or suppositories.

## A: Specific medications

### 1. Medications containing 5-aminosalicylic acid (5-ASA)

Nearly all individuals with ulcerative colitis and some with Crohn's disease take 5-aminosalicylic acid, or 5-ASA, which is chemically related but not the same as aspirin. 5-ASA is useful for the treatment of mild attacks of ulcerative colitis or Crohn's disease but its main role is in patients with inactive ulcerative colitis, where it markedly reduces the chance of a flare-up. Taking 5-ASA does not guarantee that you will remain well but it does significantly lower the risk of a flare-up. This effect probably persists indefinitely and most patients with ulcerative colitis take a 5-ASA containing medication for life. There is no evidence that long-term use of 5-ASA is harmful, in fact there is growing evidence that taking these medications long-term may lower the risk of colon cancer in patients with ulcerative colitis.

To be effective 5-ASA must remain in the bowel until it reaches the area which is diseased. If pure 5-ASA is taken by mouth, it is completely absorbed from the small bowel into

the blood. As all ulcerative colitis and some Crohn's disease occurs in the large bowel (or colon), which is beyond the site of absorption, it is necessary to modify 5-ASA to prevent it being absorbed in the small bowel. There are four 5-ASA preparations available in NZ which have been formulated to deliver the 5-ASA to the actual site of inflammation. Most studies have found them to be equally effective, both in the treatment of mild attacks of ulcerative colitis and in preventing flare-ups.

#### Sulphasalazine (Salazopyrin®)

Sulphasalazine is 5-ASA chemically linked to sulphapyridine, a sulphur antibiotic. Sulphasalazine is not absorbed into the blood from the small bowel and cannot be broken down by the body. However, bacteria in the large bowel break the link between sulphapyridine and 5-ASA, releasing free 5-ASA into the bowel. There is very little absorption of 5-ASA from the large bowel. In contrast sulphapyridine is almost completely absorbed into the blood and is thought to be responsible for most, but not all, of the side-effects of sulphasalazine. You should not take sulphasalazine if you are allergic to sulphur antibiotics. You should also tell your doctor if you think you are allergic to aspirin or if you have had a reaction to other types of medications which may contain sulphur, such as diuretics (water pills) or tablets for diabetes.

#### Side Effects of Sulphasalazine

About 10% of individuals are unable to tolerate sulphasalazine because of side-effects. These usually occur within a few weeks of starting the medication and are more frequent with higher doses (more than 4 tablets per day). In general it is best to start with a lower dose and gradually build it up.

---

*I got to the stage where even high dose steroids became useless. So what now?? I was lucky enough to be eligible for a new course of treatment called infliximab. After the 2nd infusion - I felt amazing!! Only going to the loo 2-3 times a day (compared to 20 some days) and even having ENERGY back...*

The most common side-effects are abdominal pain, nausea and vomiting, and reduced appetite. These can be helped by taking the tablets with food, rather than on an empty stomach.

Headache and skin rashes are also relatively common. Occasionally sulphasalazine causes anaemia. Rarely, it can suppress the production of different types of blood cells in the bone marrow. Other uncommon side-effects include inflammation of the liver, hair loss, blistering of the face and mouth, and rarely even a flare-up of ulcerative colitis!

Sulphasalazine can cause male infertility by reducing the sperm count. This is due to sulphapyridine and always resolves when the medication is stopped or changed to mesalazine. Rarely, it reduces the body's ability to absorb folic acid, a vitamin necessary for blood formation. This is only significant if there is increased demand for folic acid (e.g. during pregnancy) or another reason for impaired folic acid absorption (e.g. surgical removal of part of the small bowel) and is easily controlled by taking a folic acid tablet. Some patients taking sulphasalazine notice that their urine has an orange colour. This is harmless.

### **Mesalazine (Pentasa<sup>®</sup>, Asacol<sup>™</sup>, Asamax<sup>®</sup>)**

There are several varieties of mesalazine, each with different patterns of 5-ASA release, the most commonly used in NZ are Pentasa<sup>®</sup> and Asacol<sup>™</sup>.

Asacol<sup>™</sup> tablets are coated with a polymer which allows the medicine to be released when the intraluminal pH is above 7, i.e. within the terminal ileum and colon.

Pentasa<sup>®</sup> tablets have prolonged-release granules and consist of ethylcellulose-coated microgranules of mesalazine. Following administration and tablet disintegration the microgranules act as discrete prolonged-release formulations which allow a continuous release of medicine from duodenum to rectum at all pH conditions. Pentasa<sup>®</sup> tablets may be dispersed in 50ml of cold water. Stir and drink immediately.

Most individuals unable to take sulphasalazine because of side-effects are able to take mesalazine. Side-effects are relatively uncommon but nausea, abdominal pain, headaches and rashes do occasionally occur. There have been a few reports of kidney damage, presumably due to the small amount of 5-ASA absorbed from the small bowel. Mesalazine does not cause male infertility.

You should tell your doctor if you think you are allergic to aspirin.

### **Olsalazine (Dipentum<sup>®</sup>)**

Olsalazine is a prodrug that releases 5-ASA when it is broken down by bacteria in the large bowel, releasing 5-ASA.

As there is no sulphur component most individuals who are

unable to take sulphasalazine because of side-effects can take olsalazine.

The most common side-effect of olsalazine is watery diarrhoea soon after commencing olsalazine (occurs in 10% of people). This can often be improved by starting with a lower dose or by taking the medication with food, and can resolve with time. However, some patients are unable to take olsalazine because of diarrhoea. Other side-effects are quite rare; nausea, headache, joint pains, abdominal pain and skin rash have been reported. You should tell your doctor if you think you are allergic to aspirin.

### **5-ASA enemas and suppositories (Topical preparations)**

Ulcerative colitis confined to the lower part of the large bowel can be treated by medications inserted into the rectum. This method of treatment has the advantage that large amounts

of medication can be delivered to the site of disease with very little absorption into the blood (and therefore very low rate of side-effects). These preparations that are administered directly to the site of inflammation are called topical preparations.

Enemas containing 5-ASA (e.g. Pentasa<sup>®</sup> enemas) are used to control attacks of ulcerative colitis affecting the lower part of the large bowel (distal or left-sided disease). Direct comparisons with steroid enemas suggest that 5-ASA is at least as effective and possibly even more effective. The combination of topical and oral 5-ASA medications can be synergistic (work together to enhance effectiveness) in people with ulcerative colitis.

5-ASA enemas are also useful for attacks of more extensive ulcerative colitis not responding to other medications, or in conjunction with other medications.

5-ASA suppositories are easier to use than enemas but are most useful for disease confined to the lowest part of

the bowel (the rectum). These are also used in combination with oral 5-ASA medications.

There are patient information sheets available for Pentasa<sup>®</sup> enemas and Pentasa<sup>®</sup> suppositories which provide more comprehensive information about the practicalities of using these topical preparations.

## **2. Corticosteroids (steroids)**

Corticosteroids are effective medications used in the treatment of moderate to severe IBD. Prednisone (tablet), hydrocortisone (IV preparation/rectal preparation) and budesonide (tablet) are the steroids most commonly used for the treatment of IBD in NZ. They are derived from corticosteroid (or glucocorticoid) hormones produced by the adrenal gland which are essential for a range of bodily functions. They should not be confused with steroid sex hormones or

---

*...I have now been on infliximab for over 3 years - and am living a "normal" life. I always still have the odd day of diarrhoea (just my Crohn's letting me know it is still there), but on a whole this treatment has been a life saver. Thanks to this great drug and the wonderful support of my Gastroenterologist, I can now lead a normal life - I am still able to run a 1,200 acre, 5,500 stock unit farm, go hunting and do the things I love. I met my wife in 1998, and in 2006 we got married. We are now planning our first child and are looking forward to what the future brings. Hopefully many "flare up" free years!!* — MARK

with anabolic steroids used by body builders and athletes. Corticosteroids have a wide range of actions but their major effect in IBD is to suppress inflammation.

Steroids can be given as tablets, enemas, rectal foams, suppositories or intravenous injections, depending on the site and severity of inflammation. Rectal steroids (e.g. Colifoam<sup>®</sup>) are preferred for disease confined to the lower large bowel because they are poorly absorbed into the blood and therefore produce fewer side-effects. There is no point in using rectal steroids for more extensive disease, as only part of the inflamed bowel will be treated. The steroid budesonide (Entocort<sup>®</sup>) is available in New Zealand which delivers similar efficacy to prednisone but with fewer side-effects. Because of its site of delivery it is only appropriate for patients with ileal Crohn's disease and can only be prescribed by a gastroenterologist after a special authority number is obtained. Budesonide (Entocort<sup>®</sup>) is delivered to the site of disease by packaging the medication in pellets designed to release it in the last part of the small bowel and first part of the colon. It works mainly by topical action whereas prednisone is absorbed in the blood to a greater extent and therefore has a systemic "whole-body" action. The poor absorption of budesonide tablets means that 50% fewer patients will develop steroid side effects.

Although steroids are effective treatment for more severe IBD, their use is restricted by important side-effects. Therefore high doses are used to bring attacks under control, after which they are gradually withdrawn over weeks to months. Steroids have no role in preventing flare-ups in those with inactive disease. However, a few patients with persistent "grumbling" disease require prolonged treatment with steroids. In these cases the lowest possible dose is used.

#### **Side-Effects of Corticosteroids**

Corticosteroids affect a number of different body systems and as a result there is a wide range of possible side effects. While it is important to be aware of the side-effects it is also important to remember that they do not always occur and for most people these are temporary problems that tend to resolve once the dosage is reduced or treatment discontinued.

Patients with IBD are often reluctant to take steroids because of their possible effects on bodily appearance. The most common changes are increased appetite and weight gain (predominantly face and body - sometimes a "buffalo hump" of fat develops in the middle of the upper back), rounding (or "mooning") of the face, redness of the skin, acne, facial hair, easy bruising and ankle swelling. Rapid changes in weight can cause stretch marks. Some people develop wasting and weakness of the muscles of the upper arms and legs with long-term use.

Mood changes can also occur, usually a feeling of well-being but occasionally agitation, irritability, sleep disturbance, psychosis or depression.

There are a number of less visible side-effects. Steroids weaken the body's resistance to infection. You should always consult your doctor if you develop an infection while you are taking steroids. They also cause thinning of the skin and impair healing after cuts or surgery.

Steroids may raise blood sugar levels. Some people who have normal blood sugar levels develop diabetes while they are on steroids. Those with pre-existing diabetes may have to increase their treatment such as insulin dose. They can also raise blood pressure and lower the level of potassium in the blood, occasionally causing fatigue and weakness.

Prolonged use of steroids in children may retard growth. However, children with active IBD will not grow normally until the disease is brought under control. The long-term effects of withholding treatment are significantly greater than the side effects of steroids. Children with IBD often experience a growth spurt after their disease is controlled.

All of the side-effects mentioned so far are reversible, they resolve when the steroids are stopped. There are also a small number of irreversible side-effects. These include development of cataracts and most importantly, bone damage. Corticosteroids can lead to osteoporosis, or softening of bones, with the result that bones break more easily. Osteoporosis develops gradually, particularly when high doses have been used for long periods of time and is more likely in those with other risk factors (e.g. women after menopause). Treatment to prevent osteoporosis e.g. combinations of calcium, vitamin D supplements, bisphosphonate treatment (Fosamax<sup>®</sup>), are sometimes given in conjunction with a course of steroids. Rarely, they cause a sudden loss of blood supply to the bone of the hip joint (avascular necrosis of the head of the femur).

The body's normal steroid production stops when you take corticosteroids. When an attack of IBD is under control the dose of steroids should be reduced gradually to allow the body to take over again. It may take up to 12 months to restore completely normal steroid production. As increased levels of corticosteroids are necessary for your body to cope with physical stresses such as surgery or illness, you should always tell your doctor, dentist or any paramedical person treating you if you have taken steroids over the previous 12 months. You should never stop taking steroids suddenly unless advised to do so by your doctor.

### **3. Immunomodulators**

These medications work by modifying the normal function of the immune system. Many suppress the immune system so that it can no longer mount an in-inflammatory response in the diseased areas of the gastrointestinal tract. On their own, these agents do not usually suppress the immune system to the extent it is unable to defend the body against everyday infections. The modulation of the immune system can take months so some of these medications are slow to take effect. Mostly these agents are used in people with more severe IBD to maintain a remission state. The exception is cyclosporin which is used in acute severe ulcerative colitis which is not responding to corticosteroids.

#### **Azathioprine (Imuran<sup>®</sup>) and 6-mercaptopurine (6-MP, Puri-Nethol<sup>™</sup>)**

Azathioprine and 6-MP are the most commonly used immunosuppressive agents in IBD. Azathioprine, which is converted to 6-MP by the body, is more commonly used. These medications are generally used when the disease is not responding to steroids, or is only controlled by an unacceptably high dose of steroids, and for patients with frequent flare-ups or

after operations. Both medications are available in tablet form and have been in use for 20 years.

Azathioprine and 6-MP have been shown to control difficult Crohn's disease and ulcerative colitis, and to prevent flare-ups of both diseases. They have a "steroid sparing" effect, allowing the dose of steroids to be reduced to a level that is less likely to cause side-effects. These medications may take up to 6 months to reach their maximal effect. Most people once started on these medications need to take them for many years.

#### **Side-effects of azathioprine and 6-MP**

Approximately 10% of individuals are unable to continue taking azathioprine because of side-effects. However, these side-effects resolve on stopping the medication. It is not possible to predict who will get side-effects although some patients are deficient in an enzyme that breaks down the medication and this can predict which patients are more likely to get the more serious bone marrow problems.

The most important side-effect of azathioprine and 6-MP is suppression of the bone marrow, leading to reduced production of blood cells, particularly white blood cells, which are the body's main defence against infection. Bone marrow suppression can also cause easy bruising. All patients taking azathioprine require regular blood tests and should report any signs of infection (e.g. fever, chill or sore throat), bleeding or bruising immediately. Bone marrow suppression is uncommon and is reversible if the medication is stopped.

Other side-effects of azathioprine include nausea and vomiting, flu-like illness with or without fever and rashes, hair loss, inflammation of the liver and abdominal pain due to inflammation of the pancreas (pancreatitis).

Transplant patients who take azathioprine or 6-MP for prolonged periods of time have an increased risk of developing certain cancers. Although this is a theoretical concern, the risk in IBD patients taking these medications is extremely low. These medications can increase the chance of skin cancers in people who are likely to develop skin cancers anyway. For this reason and because New Zealanders have a high risk of skin cancer it is a good idea to use sun block, cover up with clothing when possible and wear a hat when you are out in the sun.

#### **Cyclosporin (Neoral®, Sandimmun®)**

Cyclosporin has the advantage of a rapid onset of action. Cyclosporin is most commonly used in people with severe ulcerative colitis who are not improving on high dose intravenous steroids and results in many patients avoiding surgery. It is not used in people with Crohn's disease. It is usually started in a hospital setting sometimes intravenously and sometimes orally using tablets. Side effects are more likely to occur when cyclosporin blood levels are high so regular monitoring of blood levels is essential (blood test just before a dose of cyclosporin).

Cyclosporin is a relatively toxic medication with a number of side-effects which are often reversible with a dose reduction or cessation of this medication. Side-effects include high blood pressure, impaired kidney function, susceptibility to infections, nausea, loss of appetite, facial hair, tremor, pins

and needles or numbness of the fingers and toes, headaches, gum swelling and epileptic seizures.

#### **Methotrexate (Methoblastin®)**

Methotrexate may be helpful for IBD which is not responding to other medications or in patients who cannot tolerate azathioprine. It is usually given as a weekly tablet or injection.

The most common side-effect is nausea and mouth ulceration which may improve with folic acid supplements. Folic acid is also necessary for blood formation. For this reason, folic acid tablets are often prescribed with methotrexate. Other less common but more serious side-effects include liver, or lung damage and bone marrow suppression. If you are on this medication you should limit alcohol intake as this greatly reduces your risk of liver damage. Methotrexate is a known teratogen, this means it can cross the placenta and damage an unborn child. It is crucial not to get pregnant on this agent (a reliable contraceptive is needed) and, regardless of your sex, if you are planning a family in the near future and you have been prescribed this medication you should discuss this with your doctor.

#### **Biological agents - Infliximab (Remicade®) and Adalimumab (Humira®)**

Biologicals are a newer category of immunomodulator that work by blocking the effects of specific substances (inflammatory mediators) that are produced by the immune system during the process of inflammation. An inflammatory mediator known to promote inflammation in people with IBD is "tumour necrosis factor alpha" (TNF), hence they are commonly called TNF blockers or anti-TNF agents. These medications work by blocking the activity of TNF which can result in rapid onset of action and improvement in symptoms in patients with IBD.

These agents are used in the treatment of moderate to severe Crohn's disease unresponsive to other therapies, for the treatment of fistulae in fistulising Crohn's disease (including severe perianal disease) and sometimes in people with severe ulcerative colitis.

Infliximab is given as an intravenous infusion and adalimumab is self-administered by the patient via an injection into the fat layer under the skin.

The most common side effect of the anti-TNF agents is an infusion or injection site reaction which is usually minor and can mostly be managed by your doctor. Occasionally a severe allergic type reaction can occur. Serious infections including tuberculosis (TB) have been reported in patients receiving these agents. However, many of the serious infections occurred in patients taking other immunosuppressive agents in conjunction with these agents, especially corticosteroids. The risk of infection is likely to be related to the total 'burden' of immunomodulatory treatment at a given time. This needs to be balanced against the advantage of being on more than one agent for control of IBD, that is greater efficacy, less allergic type reactions and a longer lasting effect, as the body does not develop as many antibodies against these anti-TNF agents. Reports of TB in people treated with these medications usually involve reactivation ('waking up') of infection in people who have previously had exposure to TB. For this reason, all patients

starting treatment need to undergo TB screening with a blood test (QuantiFERON®-TB Gold) and a chest x-ray.

Another serious but exceedingly rare side effect of these biological agents is an increased risk of a tumour of the lymph glands called a lymphoma. For more information about this please discuss this with your specialist.

## 4. Antibiotics

### Metronidazole (Flagyl®) and Ciprofloxacin

Metronidazole and ciprofloxacin are both antibiotics which have a role in the treatment of IBD. They are used almost exclusively in patients with Crohn's disease - most commonly to control anal complications such as abscesses or fistulas (abnormal channels between intestine and other organs e.g. skin). Additionally, metronidazole is also used in some patients shortly after surgery for Crohn's disease (alone or in combination with azathioprine) to prevent early recurrence of Crohn's disease in their remaining intestine.

The most common side-effects of metronidazole are nausea, loss of appetite, a metallic taste in the mouth, diarrhoea and headache. Prolonged treatment with metronidazole can damage the nerves in the feet and arms, leading to tingling and numbness. This is mostly reversible on stopping the medication but may take some months to return to normal. Some people have an unpleasant reaction to the combination of metronidazole and alcohol (flushing of the face, headache, palpitations, nausea, shortness of breath and drowsiness) so it is probably best to abstain from alcohol while on this medication.

Ciprofloxacin is mostly well tolerated with the most common side effect being diarrhoea or taste disturbance. Rarely tendon pain and inflammation of the liver can occur.

## B. Non-specific medications

### 1. Anti-diarrhoeal Medications

Loperamide (Imodium®), diphenoxylate + atropine (Diastop) and codeine phosphate reduce diarrhoea but have no effect on the inflammation which is causing diarrhoea. They are related to narcotic medications such as morphine but have a much lower risk of addiction, especially loperamide and Diastop. They work mainly by reducing the contraction of the muscle in the bowel wall, slowing the movement of bowel contents through the gut. They also cause some reduction in the amount of fluid produced by the lining of the gut.

These medications should not be used in a severe attack of ulcerative colitis, when they may cause the bowel to enlarge and burst. They can be useful to control diarrhoea during milder attacks of IBD, or in patients who have diarrhoea even though their disease is inactive. The main side-effect is constipation. Other side-effects are unusual, although probably more common with codeine phosphate than with loperamide and Diastop. Drowsiness, headache, mood changes and skin rashes can occur. Diastop contains atropine, which can cause a dry mouth, blurred vision, palpitations and difficulty passing urine, but usually only when larger amounts are consumed.

## 2. Bile Salt Binders

### Cholestyramine (Questran®) and colestipol (Colestid®)

Bile salts are a normal component of bile which is secreted from the liver into the upper gut to aid in the absorption of food. They are normally reabsorbed in the lower part of the small bowel, the terminal ileum. However, if the terminal ileum is damaged (because of extensive Crohn's disease or surgery) bile salts pass into the large bowel and cause diarrhoea.

Cholestyramine (Questran®) and colestipol (Colestid®) are two medications that bind to bile salts, preventing them from causing diarrhoea. Both are powders which are dissolved in fluid before consumption. Their most frequent side-effects are constipation, abdominal discomfort and abdominal distension. Heartburn, nausea and loss of appetite can also occur. They can also interfere with absorption of food (in which case diarrhoea may be worsened) and other medications.

## 3. Analgesics (pain killers)

### Paracetamol (Panadol®) and paracetamol + codeine (Panadeine®)

Pain most commonly occurs during a flare-up. The best treatment is to suppress the activity of the disease using one of the specific medications already discussed. However, it is perfectly safe to use common analgesics such as paracetamol or mixtures of paracetamol and codeine for a short time to relieve pain. It is best to avoid aspirin, and nonsteroidal anti-inflammatory medications such as ibuprofen (Nurofen®) and diclofenac (Voltaren®), which can cause damage to the stomach and may aggravate IBD.

A minority of IBD patients have more persistent pain. Regular analgesics can be helpful but it is important to discuss your symptoms with your doctor as this sort of pain may be caused by a complication which requires specific treatment.

## C: Supplements

### Vitamins and minerals

All patients with IBD need a well-balanced, nourishing diet. Vitamin and mineral supplements are generally unnecessary especially if the disease is inactive. However, there are a few exceptions. The most important is the use of regular vitamin B12 injections in some patients with Crohn's disease. Vitamin B12 is essential for blood formation and for nerve and brain function. It is absorbed from the lower part of the small bowel, the terminal ileum, a common site of Crohn's disease. If there is extensive Crohn's disease of the terminal ileum or if a significant length of terminal ileum has been surgically removed vitamin B12 absorption is compromised.

Most other vitamins and minerals are absorbed in the upper part of the small bowel which is less commonly affected by Crohn's disease. However, a few individuals with extensive disease or surgery require supplements, most commonly iron or folic acid. Iron supplements are commonly necessary in patients who become deficient in iron because of chronic bleeding from the bowel. Iron tablets cause the bowel motions to turn black. They can also cause indigestion, constipation, diarrhoea or nausea. Vitamin D and calcium tab-

lets are also commonly prescribed particularly in patients who require a lot of corticosteroids to help protect the bones against steroid induced osteoporosis (see corticosteroid section of this chapter).

## D. Alternative therapies

Many people with chronic conditions grow tired of their disease and look for alternative solutions to what conventional medicine has to offer. There is a common misconception that all natural remedies are safe, however this is not necessarily the case, for example opium and arsenic are both natural products. So while some alternative therapies may be harmless, or even helpful (e.g. relaxation techniques, yoga and meditation) others may be detrimental (e.g. restrictive diets) particularly if the therapist suggests that all usual medications are stopped. If you're already using or are considering using alternative approaches to manage you IBD, you should discuss this with your doctor.

## E. Drug Treatment and Pregnancy

Women with IBD who become pregnant are naturally concerned that their medications will be harmful to the baby. In general it is best to take as few medications as possible during pregnancy but it is important to realize that uncontrolled disease is a much greater threat to the baby than the medications used to treat it. For further information on specific medications and pregnancy please consult the "Sexuality, Fertility & Pregnancy" chapter. In addition, if you are concerned about taking any medications during pregnancy please discuss this with your doctor.

## Conclusion

This chapter describes the most common medications which are used in the treatment of IBD. Don't be alarmed by the list of possible side-effects. Most are uncommon and the majority of IBD patients have few problems with their medications. You should consult your doctor if you have any questions about your medications or if you are concerned about possible side-effects.

Further information concerning your medicine can be sought from your doctor or pharmacist. Consumer Medicine Information is available at [www.medsafe.govt.nz](http://www.medsafe.govt.nz)

This information is for general informational purposes and does not constitute medical advice. Please seek information and advice regarding your condition and/or treatment from your doctor.



Crohn's & Colitis New Zealand Charitable Trust  
PO Box 22280, Khandallah, Wellington 6441, New Zealand.  
Email: [Info@crohnsandcolitis.org.nz](mailto:Info@crohnsandcolitis.org.nz)  
[www.crohnsandcolitis.org.nz](http://www.crohnsandcolitis.org.nz)