

Fish oil and IBD

Research from Italy published in the New England Journal of Medicine (13 June 1996) suggested a possible role for fish oil in helping to prolong periods of remission for some people who have Crohn's disease.

Background

Fish oils have been suggested in the past for the treatment of various chronic inflammatory conditions, particularly arthritis and psoriasis, and there have been a number of research studies into its effect on colitis and Crohn's disease. In 1986, NACC funded an investigation which showed that fish oil was not very effective for the treatment of active colitis. Further research at Nottingham confirmed this. The quantity of fish oil that patients needed to take was high and this produced unpleasant side-effects (belching, unpleasant breath and diarrhoea). However, quite a few NACC members have reported through the newsletter that taking cod liver oil capsules seemed to help their symptoms.

Why should fish oil affect inflammation?

When the body is injured or attacked in some way, it produces certain types of cells which move towards the area that is damaged. These cells, called neutrophils, lymphocytes and macrophages help to attack and destroy invading viruses and bacteria. They produce chemical signals which attract more and more of these cells to the damaged area in what is called an 'inflammatory cascade'. Normally, this cascade switches off when the threat has been overcome, but, for some reason, this does not happen in colitis or Crohn's. A great deal of research is therefore focused on finding ways of stopping or reducing the chemical signals to 'switch off' the production of the inflammatory cells.

The n-3 fatty acids contained in the fish oil are known to reduce one of the chemical substances produced in the lining of the bowel which strongly attracts the inflammatory cells. They also change some of the other chemicals to a form that lessens the number of inflammatory cells moving from the blood vessels into the damaged tissue.

The Italian research.

Dr Belluzzi tried a new way of delivering the fish oil to the intestine by putting it in a capsule that would not dissolve in the stomach for at least 30 minutes. As a result, the overall dose of fish oil could be reduced by a third and the unpleasant taste of the oil was avoided. 78 similar patients took part in a trial for one year; 39 were given the fish oil and the other 39 were given a placebo in an identical capsule. At the end of the year the doctors checked which patients were still in remission and which had experienced a flare-up of symptoms. 59% of the patients who took the fish oil were still in remission, compared with only 26% of those who were given the placebo.

About 10% of the patients who were given the fish oil dropped out of the trial because of increased diarrhoea, but Dr Belluzzi believes that the coated fish oil capsules could offer an effective way to prolong remission for Crohn's patients. Professor Hodgson from Hammersmith Hospital discussed the results in an editorial in the same Journal. He points out that the patients involved in the trial had some evidence of mild inflammation before starting and that the fish oil may have helped by treating this rather than by preventing inflammation from actually starting. He estimates that about 30-40% of Crohn's patients are likely to have a mild level of inflammation similar to those people involved in the trial.

The next steps?

It is important to be aware that this research was for Crohn's disease only and that it is just one trial. The research needs to be repeated in another centre to see if the results are as successful. Also, the special capsule used in this trial was specially made and is not available anywhere else at present. Hopefully, the paper in the New England Journal will encourage some other gastroenterologists to undertake similar research.

Can you try taking fish oil and is it safe to do so?

You may be wondering whether taking fish oil in some form might help you with your Crohn's. You could do this by eating more oily fish as part of your diet or by buying fish oil capsules that are available. These would not be the same as those used in the trial and so there is no evidence that they would have exactly the same effect. The dose given in the trial would be roughly equivalent to a main meal of an oily fish each day or to taking 10 cod liver oil capsules each day, which would be quite expensive. (The capsules are 5-7p each.) Some people might experience more diarrhoea as a result and there is a small risk that very high doses of fish oils could make things worse for people who have a problem with any form of bleeding. A more moderate approach might be to take up to 4 capsules a day.

Summary

Keeping Crohn's disease in remission and reducing any related symptoms is the main aim. These key points may help you:

- Carry on taking your 5-ASA drug (Salazopyrin, Pentasa, Asacol, Dipentum or Salofalk) if your doctor has prescribed this to help keep you in remission.
- If you have Crohn's disease and smoke, stop!

(Research published in 1990 showed that stopping smoking increased the chances of avoiding a flare-up by 40% over twelve months.)

- The present trial of fish oil has shown only that this particular preparation may be effective for the 30-40% of Crohn's patients who probably have mild inflammation present. More research needs to be done.
- Adding oily fish to your diet or taking a small number of fish oil capsules may help prevent or reduce inflammation. In moderation, there is unlikely to be any harm in doing this, though some people may experience more diarrhoea.
- If you have arthritis as well as Crohn's, taking fish oil in some form may also help with the joint pains.

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This document has been prepared by NACC as general information on the subject and is not intended to replace specific advice about your treatment from your own doctor.

NACC is a voluntary Association which has 30,000 members and 65 Groups throughout the United Kingdom. The Association also provides a supportive listening service called NACC-in-Contact which is available to anyone affected by Inflammatory Bowel Disease.

Membership of the Association costs £12 for the first year and £10 subsequently. Additional donations to help the work of the Association are always welcomed.

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