CASE STUDY

Dr Annabelle Machin

A study into the effect of mood problems on inflammatory arthritis patients

I am a GP working in Staffordshire, and I have been part-funded by the Haywood Foundation to complete a PhD. My research is focussed on mood problems in people with different types of inflammatory arthritis.

Rheumatoid arthritis (RA) is a common type of inflammatory arthritis, affecting one in every 100 people. This long-term condition can cause pain, stiffness and swelling of the joints. People with RA can be more likely to develop anxiety and depression, but these mood problems often aren’t recognised or treated. Past research has shown that low mood can lead to a worse quality of life and affect how people with RA respond to their arthritis treatments. However, there is a lack of research explaining how anxiety affects people with RA.

To this end I have collected research evidence on how anxiety affects people with RA. Like depression, I have found that anxiety is also linked to increased flares of joint pain in people with RA and a poor quality of life.

To help improve this situation, I have interviewed people with RA to understand their experiences of seeking help for mood problems. During interviews, people described many barriers that have stopped them from getting treatment for their anxiety and depression. Some felt that their doctor lacked time, dismissed their concerns or prioritized physical above mental health problems. However, several felt able to discuss their mood when they had time to build a rapport with their doctor.

When people were asked about possible mood problems by a nurse, as part of a new arthritis review appointment, they felt able to talk about their feelings and thought this was due to the nurse being friendly and having time to listen. This nurse-led clinic appointment has since been provided once yearly for local people with RA, to help identify other problems related to arthritis such as mood problems.

When I shared the results of this research with people attending the Haywood User Group (HUG), they asked why the nurse-led clinic was only available for people with RA and not other inflammatory conditions. This led to the INCLUDE study (co-funded by the Haywood Foundation).

The INCLUDE study has aimed to examine how common other health problems are in people with different inflammatory conditions. These inflammatory conditions include ankylosing spondylitis, psoriatic arthritis, polymyalgia rheumatica, giant cell arteritis and RA. Within the INCLUDE study, I have developed a detailed review for people with different inflammatory conditions. People have been invited to see a nurse at their local general practice, where they have been asked questions to identify health problems linked to their condition, including anxiety and depression.
I have analysed peoples’ responses to questionnaires as part of the INCLUDE study, to see how many were found to have mood problems. The questionnaires showed that over 17% of people with inflammatory conditions had anxiety, whilst 21% had depression, much higher than in the general population. The number of people found to have mood problems from the INCLUDE questionnaires was higher than the number of people with inflammatory conditions who had an electronic record of a mood problem recorded at their general practice. These results suggest that mood problems in people with inflammatory conditions are more common than in the general population and may be under-recognised in general practice.

My research has helped to highlight how common mood problems are in different inflammatory conditions. I have found that anxiety, as well as depression, can be linked to worse symptoms and a poor quality of life in people with RA. I have also found out why mood problems may not be identified in people with inflammatory conditions. My work has supported the funding of an annual review clinic for people with RA, to improve how mood problems are identified. Plans are now being made to repeat the INCLUDE study on a larger scale, to improve how mood problems are identified and treated in people with a range of inflammatory conditions.
Part of the INCLUDE review summary sheet given to people after attending an INCLUDE review appointment.

**INCLUDE Review Summary**  
Date: / /  

As part of your INCLUDE review, we identified that you may have symptoms of, or be at risk of developing:

- Heart Disease
- Anxiety (Worry)
- Depression (Low Mood)
- Osteoporosis (Thinning of the Bones)
- No specific symptoms/risks identified

**Key Points We Discussed Today:**

- **Losing weight**  
  Reduce the size of your portions and cut down on fatty and sugary foods.

- **Eating a healthy balanced diet**  
  Eat less fatty food, red meat, full-fat dairy, pastries and cakes. Eat plenty of vegetables and fruit, aiming for five portions a day and eat more oily fish aiming for two portions a week.

- **Getting more active**  
  Aim for 30 minutes exercise five times a week so that you raise your heartbeat. Activities such as gardening, housework and walking all count.

- **Stopping smoking**  
  For help to stop smoking see useful contacts on the reverse.

- **Reducing alcohol intake**  
  For advice or support to reduce alcohol intake, see useful contacts on the reverse.

**AGREED ACTION PLAN**

- No follow-up required
- Book ECG (heart trace) for investigation of irregular pulse
- To attend for a blood test (Full Lipid Profile and LFTs)
- To seek support for mood symptoms via the wellbeing service or other contacts on the reverse
- Follow-up appointment with practice nurse to discuss: Blood Pressure ☐ Cholesterol ☐
- Follow-up appointment with GP to discuss: Blood Pressure ☐ Cholesterol ☐ Mood ☐ Bone health ☐

*Family history of heart disease/stroke in a close relative* ☐

*If you are advised to make an appointment with your practice nurse or GP following the INCLUDE review, please take this review summary with you*