Disturbed sleep matters to patients with ankylosing spondylitis

Disturbed sleep is a significant problem for patients suffering with long-term, inflammatory conditions such as Ankylosing Spondylitis and non-radiographic Axial Spondyloarthritis. Alongside other symptoms, these conditions primarily affect the axial skeleton and connective tissue, causing pain and stiffness in the lower back, spine, hip and shoulders.

This recent review of 15 scientifically robust studies shows that these patients struggle to sleep as well as healthy individuals. This includes experiencing more insomnia, waking more during the night and feeling unrefreshed after sleep. This poor quality of sleep has been correlated with other indicators of severe disease for these patients, such as high scores of pain, stiffness and fatigue. Interestingly, other less obvious aspects have also been linked with worse sleep for these patients, such as older age, female gender, less years spent in education and higher scores of depression.

Fig. 1.

Figure 1 shows the various correlations that were found within this review. Some of the specific physical measures of the disease, alongside more psychological symptoms are correlated with reports of disturbed sleep. Here the BASDAI reflects disease activity, the BASFI is a measure of
functional disability, the BASMI is a measure of patient mobility, the BASRI reflects radiographic change and the BAS-G is a measure of global wellbeing for the patient.

Most importantly, disturbed sleep is an important aspect of disease and matters to patients who suffer with these conditions. It is associated with a lower quality of life and studies of treatments such as anti-TNF medication have assessed the effects on quality of sleep.

This review found that anti-TNF medication can have a positive effect on quality of sleep for patients and regular exercise also has a positive impact. However, there is a lack of research investigating non-pharmacological treatments which document the effect of these interventions on sleep quality.

The evidence does not suggest the direction of these relationships. Whether disturbed sleep is caused by pain, whether pain is worse for those with disturbed sleep, or whether both symptoms arise from common causes, cannot be inferred from these correlations. However, we can draw the conclusion that disturbed sleep is a significant problem. It is more common for people with these conditions than in the general population and it requires greater and more accurate research in order to improve the quality of life for these patients.

In the future, monitoring the sleep pattern of patients may provide an important clue to underlying inflammation that drives symptoms of disease. Whether treatments that target sleep disturbance could improve other symptoms of Ankylosing Spondylitis and non-radiographic Axial Spondyloarthritis is yet to be seen.

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