Hertfordshire and West Essex Integrated Care System

NHS Hertfordshire and West Essex Integrated Care Board

Evidence Based Intervention

Residential exercise therapy/rehabilitation courses for the management of Ankylosing Spondylitis

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Policy: Residential exercise therapy/rehabilitation courses for the management of Ankylosing Spondylitis

Residential treatments for the management of Ankylosing Spondylitis are not routinely funded. Therapy/rehabilitation should be commissioned locally.

Introduction:

Ankylosing spondylitis (AS) is a chronic, inflammatory spinal condition which affects about one in 200 people in this country, with the male to female ratio being about 2-3:1[1], with an estimated prevalence of 6000 patients in Hertfordshire. Spinal inflammation causes pain and stiffness and if left untreated can cause a fixed, stooped posture. The most common age of onset is in early adulthood, therefore the lifetime individual impact of AS can be high. In some patients peripheral joints such as hips and shoulders are also involved[2]. The condition can also affect the eyes, lungs and heart. Physical therapy is considered an important part of the overall management of AS.

The role of exercise features prominently in relevant clinical guidelines for the management of AS (NICE clinical knowledge summary), and is supported by a mixed range of quality of evidence. Published studies mainly focus on mobility exercises, with only a small number of studies reviewing strengthening, balance or cardio-respiratory exercise, with a limited number of studies taking into account the setting these are delivered[3].

Background:

Locally there have been a small number of requests for intensive, time-limited (residential) exercise modalities which include in-patient rehabilitation or spa-therapy/exercise combinations. The residential exercise therapy/rehabilitation courses are typically two weeks and are targeted at the following people:

- New diagnosis
- Those experiencing a flare of their condition.
- People post-surgery. For example, after hip replacement
- Maximise outcome on anti-TNF therapy.

Taking an MDT approach the patient is usually supported in the following areas:

- **education:** helping patients learn about their disease and its management.
- **exercise:** reducing pain and stiffness, maintaining erect posture and preserving mobility through graded exercises and stretches (including hydrotherapy)
- **pain management:** development of pain-management strategies
- **networking**: providing the opportunity to meet, learn from and work with other patients.

In order to ensure an equitable use of finite ICB resources, a desk-top review of published evidence was undertaken for residential therapy interventions to support the management of patients with AS. In 2008, Cochrane undertook a systematic review of '*physical therapy interventions for ankylosing spondylitis*'. The review[4] focussed on scientific evidence on the effectiveness of physiotherapy interventions in the management of AS. The review included 11 trials, with a total of 763 participants, published prior to January 2007. The outcomes analysed were pain, stiffness, spinal mobility, physical function and patient global assessment. All interventions were more beneficial than no intervention or "usual care." Several trials were based on intensive, time-limited exercise interventions, such as in-patient rehabilitation or spa-therapy/ exercise combinations. The systematic review found that in-patient spa exercise therapy plus group therapy was found to be more effective than group therapy alone; individual home-based or supervised exercise programs were better than no intervention, but supervised group physiotherapy was better than home exercises.

Since the Cochrane review was undertaken there has been four further RCT[5,6,7,8] studies been published but these collectively demonstrate the difficulties in determining the effects of exercise type versus setting versus mode of delivery. Although different exercise settings appear to play a role in overall outcome, it is not possible to quantify whether benefits are due to the change in setting or environment, or the consequential support for motivation, adherence and higher exercise that may arise from supervision and/or a group mode of delivery. Unfortunately, since it is not possible to separate the effects of exercise in warm water from other passive components of spa therapy, there is currently insufficient evidence to support this. Two studies[9,10]-one RCT, found that Balneotherapy has a supplementary effect on improvement in disease activity and functional parameters in AS patients immediately after the treatment period, but further research is needed to assess the role of balneotherapy applied for longer durations in AS patients.

Unfortunately, the published studies do not provide sufficient information about disease progression given that some subjects may start from a relatively low baseline, longer studies are therefore required. In addition, the majority of the studies have not considered the long-term outcomes and/or self-management strategies would be more relevant with ICBs finite resources.

Cost effectiveness.

There are limited numbers of studies evaluating the cost effectiveness of different therapy interventions. Residential courses cost ICB's approximately £3,800 per patient for the two-week period, which is in addition to the routine management of these patients. As the longer-term outcomes of residential courses has not been fully evaluated it is difficult to equate cost savings, but supporting a patient to self-manage their condition will have a positive impact on the patients' health and wellbeing.

Conclusion:

Despite the advances in the pharmacological therapy of ankylosing spondylitis, physical therapy remains an essential part of the management of these patients. Reviewing the published studies there was insufficient evidence to show that one type of activity is more beneficial. The evidence is further constrained by very little research on the dosage (frequency, intensity and duration), stage of disease or adherence to recommended programs. Longer follow-up of the patients is therefore required in future studies to ensure that outcomes are assessed over time.

There are currently two relevant Cochrane reviews underway '*Exercise therapy in ankylosing spondylitis*' and '*Self-management programme for ankylosing spondylitis'*. This policy should be reviewed on their publication.

References:

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Patients who are not eligible for treatment under this policy may be considered on an individual basis where their GP or consultant believes exceptional circumstances exist that warrant deviation from the rule of this policy. Individual cases will be reviewed as per the ICB policy.

Change History:

Version	Date	Reviewer(s)	Revision Description
V1.1	November 2023	M Skerry	Removed reference to CCG

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