

Neck Pain management in Ankylosing Spondylitis

The ASSIGNw Team, 4th Dec 2017.



Introduction

- The Ankylosing Spondylitis Special Interest Group North West are a group of special interest Rheumatology Physiotherapists who work together reviewing research, offering peer support, developing best practice guidelines and aiming to advance the care within our field.
- The topic of neck pain management in AS was raised in 2014 which prompted a review of the literature and further discussion of how physiotherapists working with patients approach treatment strategies and choices.

The literature evidence search

Consisted of support from:

- East Cheshire NHS Trust and University Hospitals of Morecambe Bay NHS Trust clinical librarian services.
 - Search terms included:
 - 'Ankylosing spondylitis',
 - 'neck',
 - 'cervical spine',
 - 'physiotherapy' or 'physical therapy' (from 1950 onwards).
- Databases used were: MEDLINE, CINHALL, AMED, Cochrane Library, NICE Guidelines. 15 references were identified.

Summary of the literature search

- **Sparse literature existed with statistical evidence to support any specific physiotherapeutic modality or strategy for the treatment of neck pain in patients with AS.**
- Evidence was found to support using strengthening (Dimitriadis et al 2013) to help respiratory weakness in people with neck pain. It has been identified that exercise therapy appeared to be effective in neck pain management following an evidence review. This belief is to this day purported in Axial Spondylitis
- Dagfinrud H et al 2008 (Cochrane Database) reviewed 11 trials looking at Physiotherapy interventions for Ankylosing Spondylitis and found that exercise therapy was effective from a number of studies for improving spinal mobility and physical function but little mention to neck pain specifically.
- Smidt, de Vet, Bouter and Dekker (2005) also supported the use of exercise therapy (no clear definition of which exercises) to be effective in the treatment of AS. One paper from 2001 suggested that neck pain (no specific reference to causative factors) without neurological signs or symptoms can be managed conservatively with physical therapy including intermittent traction (Hardin 2001).
- Recommendations from ASAS and EULAR 2016 and NASS guidelines (2015) are generic rather than specific and don't focus on neck pain management in AS.

Group Discussion

We discussed in detail the uncertainty of what works for patients with AS and what precautions, if any, were required to be taken.

Survey Monkey

- Designed to gain as much information as possible as to current expert opinion
- Disseminated via a variety of networking opportunities.

A

- Distributed through the group via email

B

- Used on a tablet platform at the British Society of Rheumatology Conference 2015,

C

- Posted on the MSK and Rheumatology SIG iCSP discussion forums.

Survey Summary

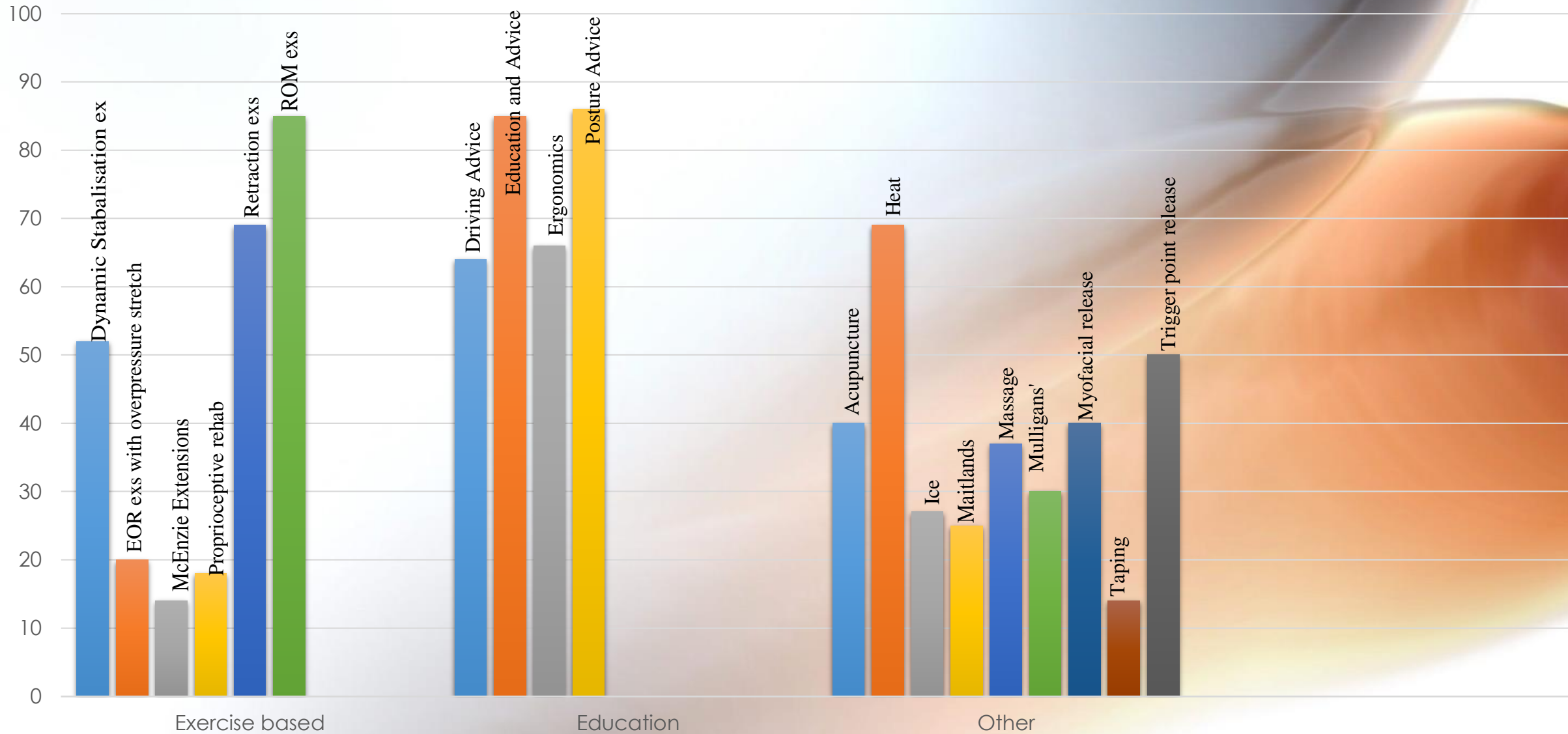
- **There were a variety of different treatment strategies; mainly focussed on education and advice.**
- Over 90% of responders are using posture advice, ROM exercises and education and advice (which appears to fit with current recommendations).
- Retraction exercises and heat are identified by over 70% of respondents
- Closely following were dynamic exercise rehab, driving and ergonomic advice.

Results: raw Data

- We had 89 people respond, with the following distribution of treatments offered:

Exercise	<u>No</u>	Advice	<u>No</u>	Other	<u>No</u>
Dynamic	50	Driving	64	Acupuncture	42
E.O.R. with overpressure stretch	20	Education	85	Heat	69
McKenzie	14	Ergonomics	66	Ice	27
				Massage	37
Proprioceptive	16	Posture	86	Mobilisations Maitland/Mulligan	25/30
Retraction	69			Taping	16
R.O.M	85			Trigger point	50

Results



Comments

Interestingly many Physios identified effective use of acupuncture for pain management in AS necks but the results may have been lesser in their numbers due to less staff being qualified in acupuncture as a treatment strategy and therefore have not been able to use it. However there is very little research evidence to support it in this specific patient group.

There is also little specific evidence on exactly what types of exercises are most appropriate to teach/ perform in this client group.

Recommendations from the survey results

Posture and ergonomic advice should be taught to all patients with an emphasis on educating benefits and focusing on function

Self management should be recommended using a range of AROM and (PROM exercises) and stretches

Heat (with precautions) is a safe non-pharmacological option to help reduced muscle pain and stiffness in order to potentially improve outcomes from exercises and myofascial release techniques could be considered.

Acupuncture could be considered as a non-pharmacological pain management option from practitioners with appropriate training and accreditation.

A combination of aerobic, stretching and strengthening exercises would appear most appropriate for this patient group in order to facilitate maintenance/ improvement in respiratory function, neck positioning, posture and flexibility.

Cautions

Careful checking of VBI should be performed by questioning and if appropriate clinical examination prior to commencing end of range or combined movement techniques/ exercises

There is limited evidence for manual therapy to the joints (i.e. Vertebral accessory mobilisation techniques) but there is some for more soft tissue related manual therapy techniques which may aid restoration of ROM and pain relief.

More evidence is needed for the use of manual therapy in axial SpA. Cases should be assessed on an individual basis, to identify risk factors such as fracture.

For those patients who have significant neck fusion it may be advisable to wear CPR bracelets to warn first aiders not to try to extend the neck for resuscitation – chin tilt only if at all possible.

If a whiplash injury has occurred it is advisable not to move the person without a cervical collar and to alert medical staff to the potential need for urgent scanning to rule out cervical fracture or atlanto-axial subluxation.

Recomendations

Patients with axial SpA are at increased risk of osteoporosis and may suffer a fracture from even minor trauma.

Other risk factors include instability and vertebrobasilar insufficiency.

Discussion with the patient's rheumatologist with regard to their bone health and risk factors should be considered.

There are a number of contra-indications to spinal manipulation, including inflammatory conditions and fractures, therefore **if there is any doubt as to the suitability of mobilisations for a patient, they should not be performed.**

Future Plans

The outcomes of this national survey and the discussions it has prompted has led us to create a home exercise booklet for patients specifically focussed on the neck pain in Ankylosing Spondylitis.

We are currently using this across the ASSIGNw network, but also looking at National publication.