



Clinical Weekly - 144th Edition

#JOURNALTUESDAY - by Abi Peck

Should exercises be painful in the management of chronic musculoskeletal pain? A systematic review and meta-analysis.

[Download here](#)

1. What is the theory behind working into pain with chronic musculoskeletal conditions?
2. What were the aims of this review?
3. What was the outcome of this systematic review?
4. What kinds of exercises did the research papers prescribe?
5. What additional tools can be useful to patients with pain +3 months?

#CLINICALSKILLSFRIDAY - by Josh Featherstone

Cranial nerve 7 – Facial nerve

General anatomy and function

The facial nerve emerges from the brainstem close to both the pons and medulla .

It has a variety of both:

- A. Motor
- B. Sensory
- C. Parasympathetic functions

A. The main motor nucleus is located at the pons.

-The muscles of the upper half of the face receive motor input from both cerebral hemispheres whereas the lower facial muscles receive it from contralateral hemispheres.

-This explains why we have volitional control of both upper and lower facial muscle action.

B. The sensory nucleus lives in close proximity to the motor nucleus and enables the sensation of 'taste' to occur

C. Parasympathetic fibres innervate glands such as the that increase salivation and emotional responses

Facial nerve testing for therapists

Firstly, assess for facial symmetry at the corners of their eyes, mouth and nasolabial folds (Known as 'smile lines'. They are the two skin indentations that are located from the side of the nose to the corners of the mouth). A flattening of the nasolabial fold maybe the first sign of a neuropathy.

Secondly, assess facial muscle function.

- Upper motor neuron lesions typically affect the lower part of the face. To assess, ask the patient wrinkle their brow or close both the eyes tightly.
- Lower motor neurone involvement can affect the entire side of the face. To assess ask the patient to smile, puff out their cheeks or show their teeth.

On next weeks #ClinicalSkillsFriday we will be looking at Cranial nerve 8

References

Butler DS (2000) 'The sensitive nervous system' Australia: Noigroup publications

Snell RS (2010) 'The cranial nerve nuclei and their central connections and distributions' In: Snell RS Clinical Neuroanatomy (332 – 370) Philadelphia: Lippincott Williams and Wilkins

Wikipedia (2017) Facial nerve Online at: https://en.wikipedia.org/wiki/Facial_nerve [Accessed on: 10th July 2017]

Wikipedia (2017) Bells palsy Online at: https://en.wikipedia.org/wiki/Bell%27s_palsy [Accessed on: 10th July 2017]





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#NEWSOFTHEWEEK - by Joe Russell

1. Sedentary behaviour affects Quality of Life in OA patient

We know that OA is responsive to exercise and that finding a good balance between rest and activity is one of the key challenges for these patients. It is all too tempting for patients to fall into sedentary behaviour patterns, but at what cost? The following paper finds that OA patients with the highest sedentary behaviour (>11 hours/day) have significantly lower QALY scores. These also happen to be the patients who benefit most from getting up and moving the most. Should we be asking our patients how long they spend sitting as well as their hobbies?

<https://www.ncbi.nlm.nih.gov/pubmed/28645770>

2. Enthesitis under the spotlight

A blog here from a good friend of mine, Chris, looking at enthesitis. Why should we be bothered about the enthesis? Well, if you see one that is painful, is that all you are looking at? It is a common extra-articular manifestation of conditions related to spondyloarthritis. It's a read that could change your practice....

<http://www.physiospot.com/opinion/enthesitis-under-the-spotlight/>

3. Radiofrequency denervations – no better than exercise alone

This RCT of over 600 patients who participated in an exercise +/- radiofrequency denervations for chronic low back pain shows that no clinically relevant differences were seen by adding denervation to the care plan of a patient. They used pain intensity as their main outcome and assessed this 3 months post procedure. This is a little contentious as some pain physicians suggest denervations may not start to take effect for up to 3 months so a longer follow up may have changed this outcome.

<https://tinyurl.com/y6vxcunp>

4. WSH hit 4 hour A&E waiting time target

A big congratulations to our emergency department colleagues at West Suffolk Hospital for hitting the national 4 hour A+E target. This is no mean feat and I am sure something lots of hospitals would be envious of. The importance of this is that it shows how well the general health infrastructure is working in West Suffolk in general, something we are a part of.

<https://tinyurl.com/y8oqtk7d>





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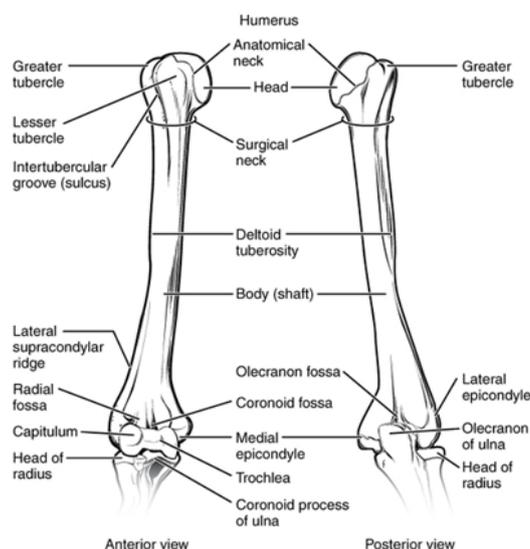
#FRACTUREOFTHEWEEK BY SAM ACKERLEY

Distal humeral fracture – Humeral mid shaft fracture

Fracture

Accounts for 3-5% of all fractures and 60% of humeral fractures (middle third).

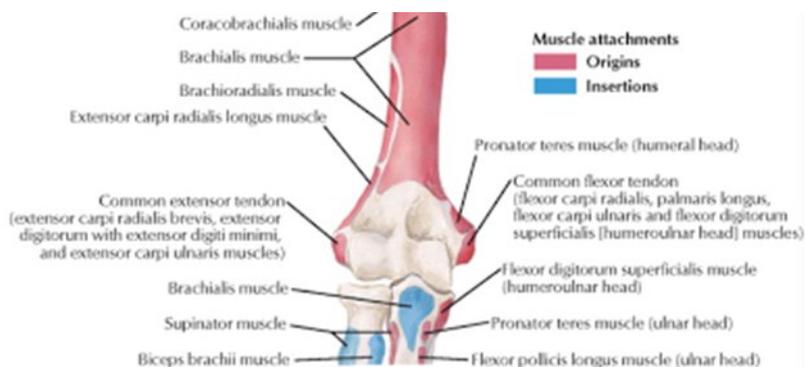
The most common associated injury is damage to the radial nerve, on account of its very close relationship to the posterior aspect of the bone, running in the spiral groove between the lateral and medial heads of the triceps muscle.



Articulations

Distally - Condyle of the humerus:

- Trochlea: head of the radius, semilunar notch of the ulna
- Radial fossa: receives the anterior border of the radial head in forearm flexion
- Capitulum: head of the radius
- Olecranon fossa: receives the olecranon with forearm extension
- Coronoid fossa: receives the coronoid process of the ulna with forearm flexion



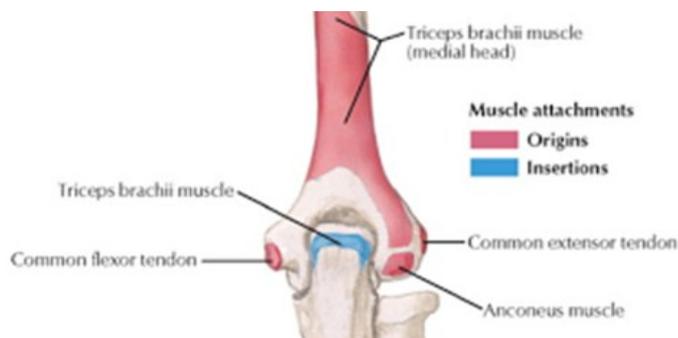
Attachments (Distally)

Lateral supracondylar ridge: origin of the brachioradialis, extensor carpi radialis longus, triceps brachii, and attachment of the lateral intermuscular septum

Medial supracondylar ridge: origin of the brachialis, pronator teres, triceps brachii, and attachment of the medial intermuscular ridge

Lateral epicondyle: origin of the supinator and some extensor muscles of the forearm, also attachment to the radial collateral ligament of the elbow

Medial epicondyle: origin of some flexor muscles of the forearm, pronator teres and attachment to the ulna collateral ligament of the elbow





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#FRACTUREOFTHEWEEK BY SAM ACKERLEY



Proximal humeral fracture in child



Comminuted humeral shaft fracture

Mechanism of injury

Transverse fractures - a direct blow to the upper arm.

Spiral or Oblique fractures- Indirect trauma from a fall or a twisting action (e.g. arm wrestling).

Comminuted – High impact.

Population

All age groups.

Bimodal distribution -3rd decade in males and the 2nd peak in the 7th decade in females

Clinical tests: None

Rehab/ Treatment

Humeral shaft fractures are usually treated with a supportive/hanging cast followed by a supportive splint.

Open reduction - internal fixation (ORIF) is required in a number of scenarios including:

- Adequate alignment cannot be maintained (more commonly encountered in transverse fractures)
- Open fractures
- Presence of vascular injury
- Segmental fracture
- Floating elbow
- Presence of significant other injuries (poly-trauma, brachial plexus injury)
- Non-union
- Pathological

Resources

<https://radiopaedia.org/articles/humerus>

<https://radiopaedia.org/articles/humeral-shaft-fracture-1>

<https://tinyurl.com/ybutt56h>

