



# Clinical Weekly - 147<sup>th</sup> Edition

## #JOURNALTUESDAY - by Abi Peck

Self-managed loaded exercise versus usual physiotherapy treatment for rotator cuff tendinopathy: a pilot randomised controlled trial. [Download here](#)

### 1. Aims of the study?

A pilot study to see if a loaded shoulder programme is worth investigating/researching further

### 2. What does Chris Littlewoods theory of exercise involve?

Advocates a loaded shoulder programme to treat rotator cuff pathologies

Loaded against gravity or resistance

Advised to work into discomfort as long as there is no increase in pain post exercise

### 3. What were the results of this study?

Both groups improved post treatment

A self-managed loaded exercise group shows value with clinical significant outcomes.

### 4. How does the treatment method differ from other techniques?

General graded strengthening programme

Easy to perform

Minimal time constraints

### 5. How would this change our practise?

Moves away from specific loading

More emphasis on self-exercise progressions and management

## #CLINICALSKILLSFRIDAY - by Josh Featherstone

### Cranial nerve 10 – Vagus nerve

#### General Anatomy and function

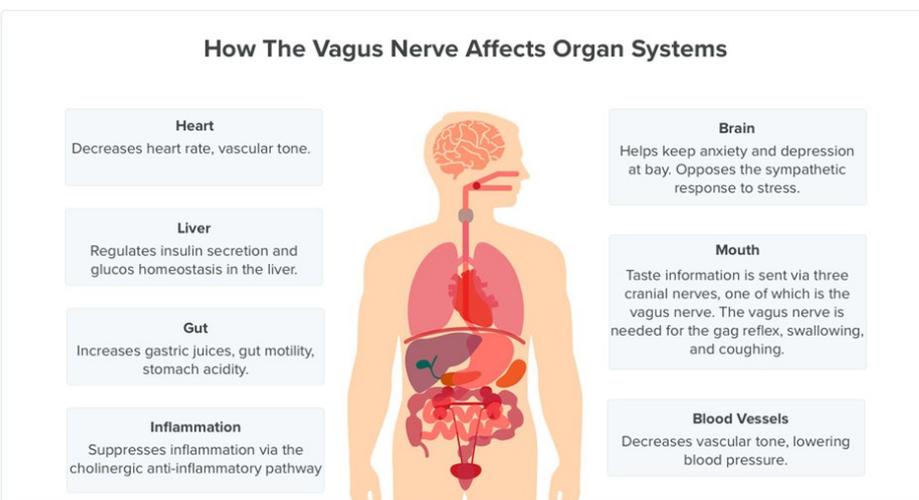
The vagus nerve is the major parasympathetic nerve in the body and the longest nerve in the autonomic nervous system

It originates at the medulla oblongata and travels through the jugular foramen and into the carotid sheath between the internal carotid artery and the internal jugular vein down to the neck, chest, and abdomen, where it contributes to the innervation of the viscera, reaching all the way to the colon.

Besides giving some output to various organs, the vagus nerve comprises between 80% and 90% of afferent nerves mostly conveying sensory information about the state of the body's organs to the central nervous system.

#### Testing of vagus nerve function for clinicians

Nasal quality of a patients voice will occur if the nerve is affected and observation of ease and control of swallowing is enough to observe here.



#### References:

Butler DS (2000) 'The sensitive nervous system' Australia: Noigroup publications  
 Wikipedia (2017) Vagus nerve Online at: [https://en.wikipedia.org/wiki/Vagus\\_nerve](https://en.wikipedia.org/wiki/Vagus_nerve)  
 [Accessed on: 02 August 2017]

On next weeks #ClinicalSkillsFriday we will be looking at Cranial Nerve 11





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## #NEWSOFTHEWEEK - by Liz Wright

### 1. Be a movement optimist

Greg Lehman presents this new infographic! Sitting and posture have consistently been shown to be poorly linked to pain. There should be emphasis on the fact that there is no perfect posture. The body is built to move and built to adapt. The infographic explains how to helpfully discuss 3 proposed problems that are often reported by patients far too commonly; deviations in structure or symmetry, 'terrible posture' on sitting/standing and sitting in desk based jobs is 'harmful' to the back. Make sure you are also familiar with Greg Lehman's website – filled to the brim with blogs regarding pain science and biomechanics.

<https://pbs.twimg.com/media/DFCQnZ8XoAl7fRK.jpg>

<http://www.greglehman.ca/>

### 2. Introduction to systematic reviews: online learning module

Useful tool to refresh your knowledge of research methods. This should take no more than 45 minutes. Further modules do come at a charge however this one remains free. It provides an overview of the rationale and process of undertaking a systematic review. Explains the Cochrane, its history, impact and available support. If you wish to refresh your knowledge on the following topics; differentiating between systematic reviews, meta-analyses, and narrative review, recognizing the importance of systematic reviews in making informed decisions about treatment options and the process of undertaking a Cochrane review – this is for you!

<http://bit.ly/2uvO51R>

### 3. Financial incentives and health coaching to improve physical activity following total knee replacement: a randomized controlled trial

Commonly those who have undergone TKR do not increase their physical activity following surgery. This study assessed whether financial incentives and health coaching (telephone) would improve physical activity in persons undergoing TKR. A factorial RCT was designed– people were assigned to 1 of 4 arms: attention control, telephonic health coaching (THC), financial incentives (FI), or THC+FI. Step counts and minutes of physical activity with a Fitbit Zip were measured and compared the changes from pre-TKR to 6 months post-TKR across the 4 study arms. Results suggested a dual THC+FI intervention led to substantial improvements in step count and physical activity following TKR. Is this a surprise?!

<http://bit.ly/2uTnTka>

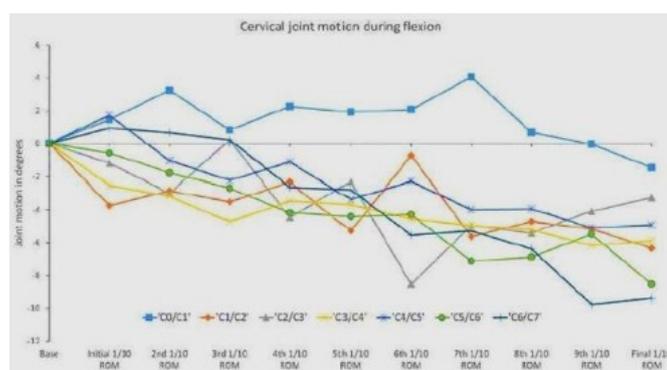
### #TWEETOFTHEWEEK

<http://bit.ly/2tWkbC1>

 **Physio Meets Science**  
@PhysioMeetsScience

Following 

What is a normal segmental motion in the c-spine? With what should we compare? It's as individual as a signature!





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## #FRACTUREOFTHEWEEK BY SAM ACKERLEY

### Radial Head and Neck Fractures -Part 1

#### Articulations

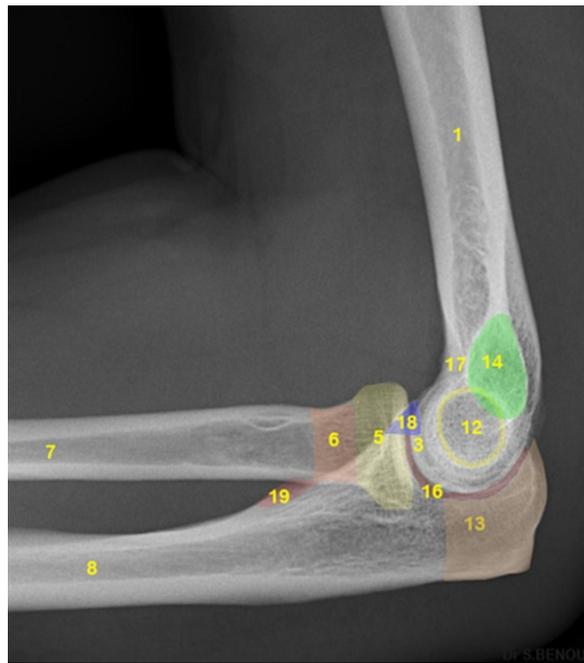
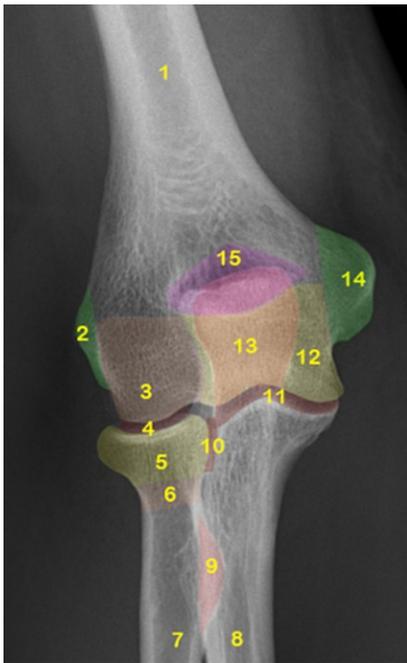
The elbow joint is made up of three articulations:

- Radio-humeral(4): capitellum(3) with the radial head (5)
- Humero-ulnar joint (11): trochlea (12) with the trochlear notch (16).
- Proximal radio-ulnar joint (10): radial head (6) with the radial notch of the ulna.

Full flexion: Coronoid process--coronoid fossa

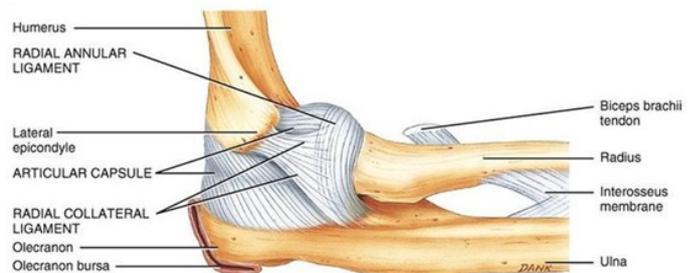
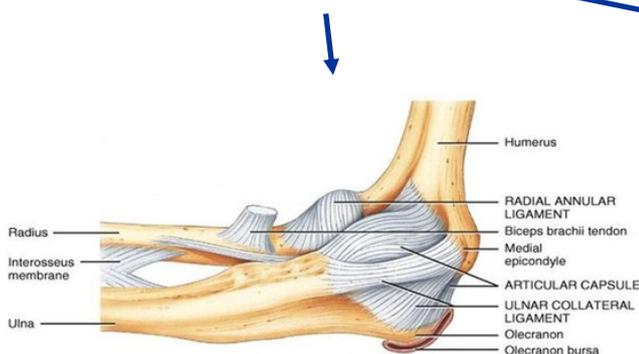
Radial head -radial fossa (Humerus)

Full extension: Olecranon process--olecranon fossa



- 1.Humerus
- 2.Lateral epicondyle
- 3.Capitellum
- 4.Humero-radial joint
- 5.Radial head
- 6.Radial neck
- 7.Radius (Shaft)
- 8.Ulna (Shaft)
- 9.Radial tuberosity
- 10.Proximal radio-ulnar joint
- 11.Humero-ulnar joint
- 12.Trochlea of humerus
- 13.Olecranon
- 14.Medial epicondyle
- 15.Olecranon fossa
- 16.Trochlear notch
- 17.Coronoid fossa
- 18.Coronoid process
- 19.Ulnar tuberosity

#### Ligaments





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## #FRACTUREOFTHEWEEK BY SAM ACKERLEY

### Bursae

Superficial olecranon bursa: lies between the olecranon and the subcutaneous tissue.

Subtendinous olecranon bursa: lies between olecranon and triceps brachii tendon

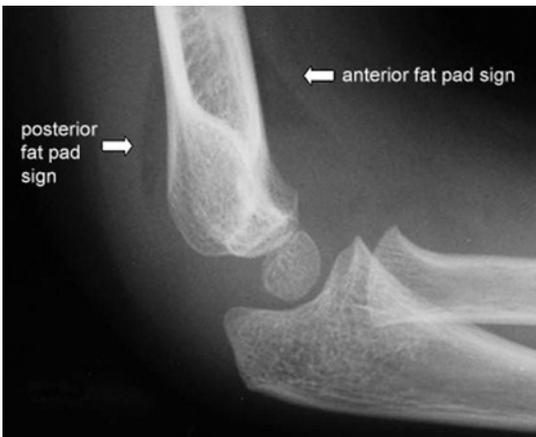
Intratendinous olecranon bursa: variably lies in the triceps brachii tendon.



### Joint capsule

The joint capsule has two layers, deep and superficial, and attaches proximally to the radial, coronoid and olecranon fossae.

Distally, it attaches to the annular ligament of the radius and coronoid process of the ulna. The volume of the joint capsule is 24-30 mL.



### Fat pads

There are three fat pads of the elbow, which sit between the two layers of the joint capsule, making them extra-synovial

- Coronoid fossa fat pad (anterior)
- Radial fossa fat pad (anterior)
- Olecranon fossa fat pad (posterior)

Fat pad sign does not equal fracture but does indicate an increased chance of a fracture

### Resources

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

<https://radiopaedia.org/cases/normal-radiographic-anatomy-of-the-elbow-1>

<http://www.wikiradiography.net/page/Soft+Tissue+Signs-+The+Elbow>

<https://s-media-cache-ako.pinimg.com/736x/a6/bf/cb/a6bfcbb4f320deoc16dd337430626dfb--hand-therapy-massage-therapy.jpg>

[https://clinicalgate.com/wp-content/uploads/2015/04/B9781416029021500899\\_gr4.jpg](https://clinicalgate.com/wp-content/uploads/2015/04/B9781416029021500899_gr4.jpg)

