

Clinical Weekly - 138th Edition

#JOURNALTUESDAY - by Abi Peck

Rheumatoid Arthritis Download here

- 1. What is rheumatoid arthritis?
- 2. What are the symptoms of rheumatoid arthritis?
- 3. What does this paper suggest is the timeframe from the onset of symptoms to delay disease progression?
- 4. What blood tests should be carried out for rheumatoid arthritis according to this paper?
- 5. What are the NICE guidelines for rheumatoid arthritis referral?

#CLINICALSKILLSFRIDAY - by Josh Featherstone

Cranial Nerve Testing

Over the next 12 weeks will be reviewing a series focussed on the cranial nerves. Understanding the functional differences between them, their anatomical distributions, MSK masqueraders and how to assess them.

Brief overview:

Cranial nerves emanate from the brain and are mostly numbered in the order to which they start anatomically. They are distinctly different to spinal nerves and are more functionally atunned. Some carry just motor fibres. Some just carry sensory fibres, whilst some contain both some carry parasympathetic fibres, some taste, some both or some none at all.

<u>Cranial nerve 1</u> - Olfactory nerve which is responsible for smell.

Taste and smell require a chemical stimulus onto their receptors to ignite a response and are therefore closely related. A dysfunction of one sense will usually correspond with dysfunction of the other. Olfactory receptors respond to lower concentrations of odour and are therefore able to distinguish between certain smells

Disease of olfaction causing anosmia (loss of smell)

-Nasal and paranasal diseases

Infections such as common cold, rhinitis and encephalitis Intranasal cancers and meningiomas

-Head trauma

Damage to the olfactory nerve as it enters the skull at the ethmoid bone

Fractured anterior fossa

TBI's, ABI's

Contusions to the occipital or frontal lobe

Visual disturbances might also be expected alongside anosmia

-Other causes

Aging, Parkinson's disease and Alzheimer's disease

Frontal sinus Olfactory bulb Anterior ethmoidal nerve Septal olfactory nerves Internal nasal branches of anterior ethmoidal nerve Pterygopalatine ganglion (in pterygoid canal) Nasal Septum Nasopalatine nerves Greater palatine nerve Lesser palatine nerve

Anosmia Ax

Testing for disturbances to smell involve the patient closing their eyes and distguinshing whether they can smell odours that are non-irritant such as coffee or vanilla. The appreciation for scent is more important than the detection of what they are smelling

References

Finelli PF, Mair RG (date) 'Disturbances of taste and smell' In: Bradley WG Neurology in Clinical Practice: Principles of diagnosis and management Volume 1 (257 - 264) Philadelphia: Butterworth Heinemann Butler DS (2000) The sensitive nervous system Australia: Noigroup publications







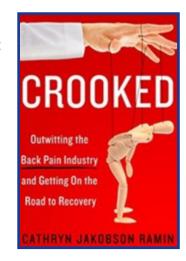
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#NEWSOFTHEWEEK - by Liz Wright

1. Exposing the 'Crooked' Back Pain Industry

After spending decades and thousands of dollars on treatments for her chronic back pain, investigative journalist Cathryn Jakobson Ramin found a larger problem in the world of spine health.

Ramin travelled the globe, served as a 'guinea pig' for multiple therapies, and interviewed more than 600 patients, doctors and therapists. In the end, she found that what ultimately worked for her was (no guesses!)......intensive, directed exercise. Discussion points include; why an MRI-will this change your management? Disposing of the view that you should 'look for someone to fix you', instead emphasising the importance of self-management; what 'degenerative disc disease' really means and how language used can hugely influence a patients interpretation and hence future actions. Clear and practical advice to back suffers is included. Perhaps most shockingly - the question posed to spine surgeons: 'Would you have spine surgery?' (Specifically lumbar fusion or disc replacement surgery) In response, all said 'No,' except one.



http://www.nextavenue.org/book-exposes-crooked-back-pain-industry/

2. What Perfect posture does not exist

In this 5 minute video Greg Lehman explores when biomechanics and posture are important for example; during high load activities when your biomechanics and form can influence tissue injury, incident of dynamic knee valgus where posture can fail and result in ACL injury. However, more often then not the importance of posture is over emphasised. The body is amazingly adaptable so if movement flaws do exist how do we explain the movement flaws in top-level athletes and paralympians? We can't and we have labelled 'flaws' unnecessarily. Rather than the



focus on posture we should focus on emphasising the hindrance of lack of movement. People can adapt to any posture as long as they desensitize to it.

http://www.fxnlmedia.com/portfolio/perfect-posture-doesnt-exist-2/

3. Smoking Predisposes to Rotator Cuff Pathology and Shoulder Dysfunction: A Systematic Review

This systematic review investigated the association of smoking with rotator cuff (RTC) disease and shoulder dysfunction, defined as poor scores on shoulder rating scales. Smoking is associated with RTC tears, shoulder dysfunction, and shoulder symptoms; the acceleration of RTC degeneration and increased prevalence of larger RTC tears. Suggesting that smoking may increase the risk of symptomatic RTC disease, which could consequently increase the need for surgical interventions. Brief interventions for smoking cessation advice can be effective, yet how many of us broach this subject?

https://twitter.com/joester1806/status/865191528469278720







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#VITAMINOFTHEWEEK BY SAM ACKERLEY

Vitamin K is a group of fat soluble vitamins including two natural vitamers: vitamin K1 and vitamin K2

Vitamin K1, also known as phylloquinone, is made by plants, and is found in highest amounts in green leafy vegetables because it is directly involved in photosynthesis.

Bacteria in the gut flora can also convert K1 into vitamin K2 (menaquinone).

Vitamin K is stored in fatty tissue and the liver.



Function

The human body requires vitamin k for synthesis of protein prerequisites for blood coagulation and for controlling binding of calcium in bones and other tissues.

Vitamin K2 helps to prevent atherosclerosis by helping to regulate calcium in artery linings and other body tissues.

Vitamin K is part of the suggested treatment regime for poisoning by rodenticide (pesticide poisoning).

Top 10 sources (Per 100 grams)

- 1.Herbs Dried Basil 1714.5µg (2143%)
- 2. Green Leafy Vegetables Kale, cooked 817µg (1021%)
- 3. Salad Vegetables (Spring Onions/Scallions) 207µg (259%)
- 4.Brassica Vegetables (Brussels Sprouts, cooked) 140.3µg (175%)
- 5. Chili Powder & Hot Spices (Chili Powder) 105.7µg (132%)
- 6.Pickles (Cucumber, Sweet) 76.7µg (96%)
- 7. Soybeans (Cooked) 70.6µg (88%)
- 8.Olive Oil 60.2µg (75%)
- 9.Dried Fruit (Prunes) 59.5μg (74%)
- 10. Asparagus, cooked 50.6µg (63%)



Deficiency - hypovitaminosis K

Newborn infants are at an increased risk of deficiency. Other populations with an increased prevalence of vitamin K deficiency include those who suffer from liver damage or disease (e.g. alcoholics), cystic fibrosis, or inflammatory bowel diseases, or have recently had abdominal surgeries.

Symptoms include:

- -Bruising/ Hematomas (localized collection of blood outside the blood vessels)
- -Petechiae (red or purple spot on the skin, caused by a minor bleed from broken capillary blood vessels)
- -Weeping of blood from surgical or puncture sites
- -Stomach pain
- -Increased risk of uncontrolled bleeding
- -Cartilage calcification
- -Malformation of developing bone or deposition of insoluble calcium salts in the walls of arteries.
- -In infants, it can cause some birth defects such as underdeveloped face, nose, bones, and fingers

Resources:

https://en.wikipedia.org/wiki/Vitamin_K

https://www.healthaliciousness.com/articles/food-sources-of-vitamin-k.php

https://en.wikipedia.org/wiki/Vitamin_K_deficiency

http://cdn.vitaminsestore.com/wp-content/uploads/2015/04/Vitamin-K.jpg

http://healthosphere.com/wp-content/uploads/2011/12/petechiae-pictures.jpg









