



Clinical Weekly - 133rd Edition

#JOURNALTUESDAY - by Abi Peck

Intraarticular injections (corticosteroid, hyaluronic acid, platelet rich plasma) for the knee osteoarthritis

[Download here](#)

1. What was the aim of this paper?

Discussion about the use of different injections in the treatment of knee osteoarthritis.

2. What does each injection aim to do?

-Corticosteroids have anti-inflammatory and immunosuppressive effects; they disrupt the cascade of inflammatory mediators to reduce heat, swelling, erythema and tenderness and increase the thickness of Hyaluronic acid (natural lubricant in joints).

-Hyaluronic acid injection is thought to restore normal viscoelastic properties within the joint. Synovial fluid and hyaluronic acid are natural substances within the joint that act as a lubricant and shock absorber.

-Platelet rich plasma injections are thought to aid in the healing process by releasing growth factors and bioactive molecules.

3. What is the evidence in NICE guidelines for using injections in the treatment of OA?

Intra-articular injections

-**1.5.12** Intra-articular corticosteroid injections should be considered as an adjunct to core treatments for the relief of moderate to severe pain in people with osteoarthritis. [2008]

-**1.5.13** Do not offer intra-articular hyaluronan injections for the management of osteoarthritis. [2014]

NICE (2014) Osteoarthritis: Care and Management. Available at: <https://www.nice.org.uk/guidance/CG177/chapter/1-Recommendations>. Accessed: 5/4/17

4. Based on the evidence presented in this paper do the benefits outweigh the risks?

Benefits: considered safe and positive effects on patients satisfaction

Risks: septic arthritis, soft tissue infection, pain/swelling/bruising post injection, side effects, placebo.

5. What does the AHP pathway suggest for knee OA?

Advice, education, exercise, pain/symptom management, surgery

Mild/moderate should be managed conservatively for 6 months before onward referral

Severe symptoms should be referred on immediately on the pathway + get physio advice in the meantime

6. Based on this paper should we be referring people to ESPs for injections?

Open question– any comments to Abigail.peck@ahpsuffolk-cic.nhs.uk





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#CLINICALSKILLSFRIDAY - by Jess Miller

#CLINICALSKILLSFRIDAY by Jess Miller– Finger Flexor Reflex

The finger flexor reflex is innervated by the ulnar and medial nerves through the nerve root C8.

Patient rests their hand with their palm facing upwards and fingers slightly flexed. The clinician interlocks their fingers over the patient's upturned fingers then strikes their own fingers.

A positive response is reproducing slight flexion of the patient's fingers.



For the next #CLINICALSKILLSFRIDAY– Tensor fascia lata reflex
Any pictures, suggestions or comments to Jessica.z.miller@ahpsuffolk-cic.nhs.uk

#NEWSOFTHEWEEK - by Liz Wright

1. A targeted cognitive functional approach to for the management of back pain.

Peter O'Sullivan highlights the enormous personal, economic and social burden of persistent back pain (PBP) and the failure of current therapies to effectively manage the problem. The multi-dimensional nature of nature of PBP is discussed, specifically factors related to pathoanatomical, physical lifestyle, psychological, cognitive, social, neurophysiological and genetics. These factors often co exist and result in a viscous cycle of pain and disability.

A definitive pathoanatomical diagnosis cannot be made for 85-90% of cases of LBP disorders. In pain-free populations there is a high prevalence of abnormal findings on MRI (e.g. disc degeneration 91% and disc protrusions 32%). Prospective studies show that depression is also a stronger predictor for LBP than MRI results. Early imaging for minor low back pain has been found to result in poorer prognosis. HCPs ultimately play a critical role in communicating radiological findings in a way that is evidence based and does not create fear, causing patients to catastrophise their condition. Education is paramount to therapists and patients. Management is a challenge and so HCPs must be prepared to maintain evidence based practice in order to assist patients effectively. Read on!

<http://www.aspetar.com/journal/upload/PDF/2015419164013.pdf>





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#NEWSOFTHEWEEK - by Liz Wright

2. Video to highlight time to 'abandon ship' on arthroscopic partial meniscectomy on middle age and older patients

Part 1(duration = 4:39) and part 2 (3:18) explaining findings from the Finnish Degenerative Meniscus Lesion Study. Findings and clinical implications are clearly explained in a non nonsense, non-jargon manner. Perhaps these short videos could be useful to educate those selected individuals wishing to go straight for the invasive approach?

<https://www.youtube.com/watch?v=RaDWkJHmEBo&t=140s>

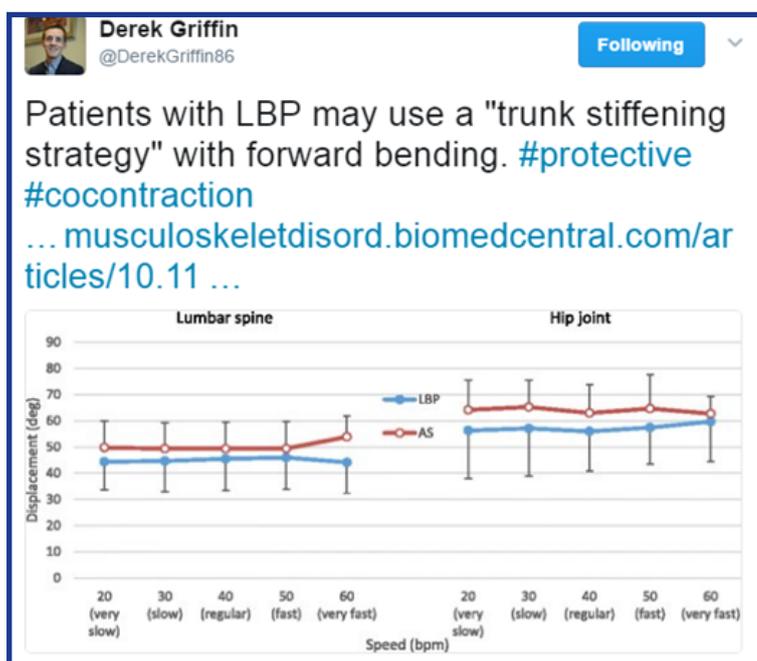
<https://www.youtube.com/watch?v=bQeCZIKJyJM&t=23s>

3. Falls now most common type of major trauma in England and Wales a recent report reveals.

According to the Trauma Audit and Research Network, hosted by the University of Manchester, showing that falls from a standing height are now the most common cause of major trauma. Older people, often with fragility, present specific challenges to the trauma centres as they are more likely to have other, co-existing illness which require a different response involving specialists in the care of the elderly. There is an urgent need for prevention programmes to tackle this growing problem. We need to vigilant to identifying at risk individuals are ensuring suitable management is provided to ensure effective falls prevention.

<http://bit.ly/2onWG2E>

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



#TWEETOFTHEWEEK

Follow the link for open access, study findings conclude that bending speed imposes different levels of demand on the kinematics and pattern of the lumbo-pelvic movement.

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





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#VITAMINOFTHETWEEK BY SAM ACKERLEY

Folic acid / Folate / Vitamin B₉

Folate is an essential water-soluble vitamin which belongs to the B complex. Other names include vitamin B₉, vitamin Bc, vitamin M, folacin, and pteroyl-L-glutamate. Folic acid is the synthetic form of vitamin B₉ (folate) found in fortified foods and supplements. Similar to most vitamins the nature state of vitamin B₉ (folate) is preferred, and better for absorption.

Function

Folate is necessary for the production and maintenance of new cells, for DNA and RNA synthesis. It is also required for preventing mutations or changes to DNA thus is thought to help prevent cancer. Folate is especially important during pregnancy and infancy where rates of cell division and growth are high. As Folate is important for cell division it plays a large role in erythropoiesis: the production of red blood cells (But also white blood cells).

Folate is necessary for fertility in both men and women and contributes particularly to spermatogenesis. Long-term supplementation with folic acid has been shown to reduce the risk of stroke and heart disease.

Top 10 sources (Per 100 grams)

- 1: Beans (Black Eyed Peas - Cooked) 208µg (52%)
- 2: Spinach 194µg (49%)
- 3: Lentils (Cooked) 181µg (45%)
- 4: Asparagus (Cooked) 149µg (37%)
- 5: Lettuce (Cos or Romaine) 136µg (34%)
- 6: Broccoli (Cooked) 108µg (27%)
- 7: Bread (Wheat Bread) 85µg (21%)
- 8: Avocado 81µg (20%)
- 9: Tropical Fruits (Mango) 43µg (11%)
- 10: Oranges 39µg (10%)

Deficiency

A folate deficiency can be caused by an unhealthy diet, diseases in which it is not well absorbed (Crohn's disease or celiac disease), genetic disorders that affect levels of folate, certain medicines and alcoholism.

As folate deficiency significantly hinders erythropoiesis, where normal DNA replication, DNA repair and red blood cell division are impeded this produces large immature red blood cells characterized by megaloblastic anemia.

Deficiency during pregnancy is linked to an increased risk of neural tube defects where during embryo development the neural tube (which later forms the brain + spinal cord) fails to close. These defects include spina bifida which affects the spine, anencephaly which results in little to no brain, encephalocele which affects the skull, and iniencephaly which results in severe neck problems.

Resources:

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

http://www.health.harvard.edu/staying-healthy/listing_of_vitamins

<http://www.knowabouthealth.com/wp-content/uploads/2010/12/spot-pic-birth-defects.jpg>

