



# Clinical Weekly - 132<sup>nd</sup> Edition

## #JOURNALTUESDAY - by Abi Peck

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

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1. What was the aim of this paper?
2. What does each injection aim to do?
3. What is the evidence in NICE guidelines for using injections in the treatment of OA?
4. Based on the evidence presented in this paper do the benefits outweigh the risks?
5. What does the AHP pathway suggest for knee OA?
6. Based on this paper should we be referring people to ESPs for injections?

## #CLINICALSKILLSFRIDAY - by Jess Miller

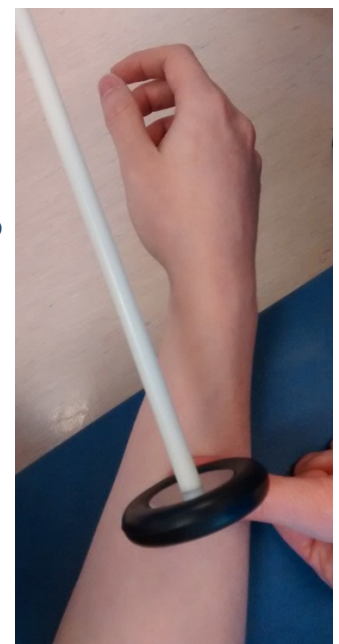
### **#CLINICALSKILLSFRIDAY by Jess Miller- Brachioradialis Reflex**

The brachioradialis reflex is innervated by the radial nerve (C6).

Support the patient's forearm in a neutral position and allow the wrist to fall into ulnar deviation. Strike the brachioradialis tendon with the reflex hammer at approximately 4-8cm proximal to the radial styloid process.

A positive response is reproducing slight wrist extension and/or radial deviation, supination and elbow flexion.

For the next **#CLINICALSKILLSFRIDAY**- Adductor reflex  
Any pictures, suggestions or comments to [Jessica.z.miller@ahpsuffolk-cic.nhs.uk](mailto:Jessica.z.miller@ahpsuffolk-cic.nhs.uk)





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## #NEWSOFTHEWEEK - by Rob Walker

1. Robsy loves an infographic. Really interesting piece from BJSM regarding return rates to sport for middle-third clavicle fractures. Had a couple of rugby players in clinic since Christmas, one surgical and one conservative. <http://bjsm.bmj.com/content/early/2017/04/11/bjsports-2016-097445>

2. An interesting Q&A with Dr Darren Beales and Prof Peter O'Sullivan regarding the assessment and management of pelvic girdle pain. They touch on the use of manual therapy, differentiation between PGP and LBP, and how they would treat a chronic case of PGP. Tricky patients! <http://www.pain-ed.com/wp-content/uploads/2013/08/SIJ-pelvis-In-Touch-Beales-Osullivan.pdf>

**Return Rates and Return Times to Sport for Middle-Third Clavicle Fractures**

Important knowledge for management of these injuries in athletes.

- Clavicle fractures are the **4<sup>th</sup>** most common sport-related fracture.
- Of all sport-related fractures, clavicle fractures take the **3<sup>rd</sup>** longest time to return to sport.

Clavicle fractures are most common in rugby, american football, cycling and soccer.

All undisplaced middle-third fractures should be managed conservatively.

For displaced middle-third fractures, surgical management can offer improved return times to sport over conservative management.

The choice of surgical technique for middle-third fractures is guided by the fracture configuration; the optimal surgical technique remains to be defined.

Fracture Type	Return to Sport Rate	Return Time
Undisplaced Non-Surgical	95%	11 weeks
Displaced Non-Surgical	93%	22 weeks
Displaced Surgical	98%	9 weeks

Robertson, G.A., Oliver, C.W. and Scott, H., 2017. Infographic: Return Rates and Return Times to Sport for Middle-Third Clavicle Fracture. Important knowledge for management of these injuries in athletes.

**HEALTH BENEFITS OF GOLF**

Get out and play golf. A sport for all with fantastic physical & mental health benefits. Golf offers a huge diversity of venues, environments & social interaction opportunities for people across the world.

A unique sport which suits participants of all ages with people of mixed ability, sex and age able to play together. Excellent psychosocial benefits to participants.

**FRESH AIR & EXERCISE**

The average round of 18 holes of golf will take around 12,000 steps and cover 8kms. Exceeding the common recommended daily amount of steps for health. Regular walking has many health benefits.

Health benefits for both young & old from playing golf:

- Get fit
- Make friends
- Social interaction
- Weight loss
- Can both prevent & treat many chronic diseases including diabetes, heart disease, high cholesterol

Children who are physically active perform better at school & get higher grades.

**PLAY GOLF AND LIVE LONGER**

Golf is played by over 55 million people around the world.

Golfers who walk and carry their own bag around 18 holes of golf burn 721 calories. If you pull a trolley = 718 calories, with a caddy = 613, with a ride on buggy = 411 calories.

Life expectancy: Average age vs Golfers. It has been shown that people who play golf regularly have a life expectancy **5 years** above the average of people who don't play golf.

Risk of Type II diabetes drops 58% in people who exercise 4 hours a week, such as a round of golf.

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References:  
 1) Forsgren, B., Broman, G., Faine, U., Vagaro, D., & Ahlbom, A. (2009). Golf: A game of life and death - reduced mortality in Swedish golf players. *Scandinavian Journal of Medicine and Science in Sports*, 19, 419-424.  
 2) Lindstrom, J., Louheranta, A., Mannelin, M., Rautava, M., Salonen, V., Eriksson, J., Uusitalo, M., & Tuomilehto, J. (2009). The Finnish Diabetes Prevention Study (DPS). *Diabetes Care*, 32(12), 3230-3236.  
 3) Wilkoff, N. (2009). *An Exercise in Fun!* Colorado Avild Golfer, April Edition.

3. Finally after a great Masters tournament last week, a golf inspired infographic from the European Tour Performance Institute and Physio Unit discussing the health benefits of playing regularly. A whopping 5 extra years of life expectancy if you play regularly! Alongside a great social benefit. Lets hope we get more and more staff playing in our annual AHP Thomas Cup.



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## #VITAMINOFTHETWEEK BY SAM ACKERLEY

### **Biotin**

Biotin is a water-soluble B-vitamin, also called vitamin B7 and formerly known as vitamin H or coenzyme R. The "H" in vitamin H represents Haar und Haut, German words for "hair and skin". There are two forms of biotin found in living cells: free and protein-bound.

### **Function**

Biotin is necessary for cell growth, the production of fatty acids, and the metabolism of fats and proteins. Biotin assists in various metabolic reactions involving the transfer of carbon dioxide.

As biotin is necessary for hormone production it is also thought to be a contributor in maintaining a steady blood sugar level.

Biotin is used as a dietary supplement for strengthening hair and nails however evidence support this is poor.

### **Top 10 sources (Per 100 grams)**

Brewer's yeast: 188.8 mcg

Soybeans: 179.4 mcg

Beef liver: 113.3 mcg

Butter: 94.3 mcg

Split peas: 77.7 mcg

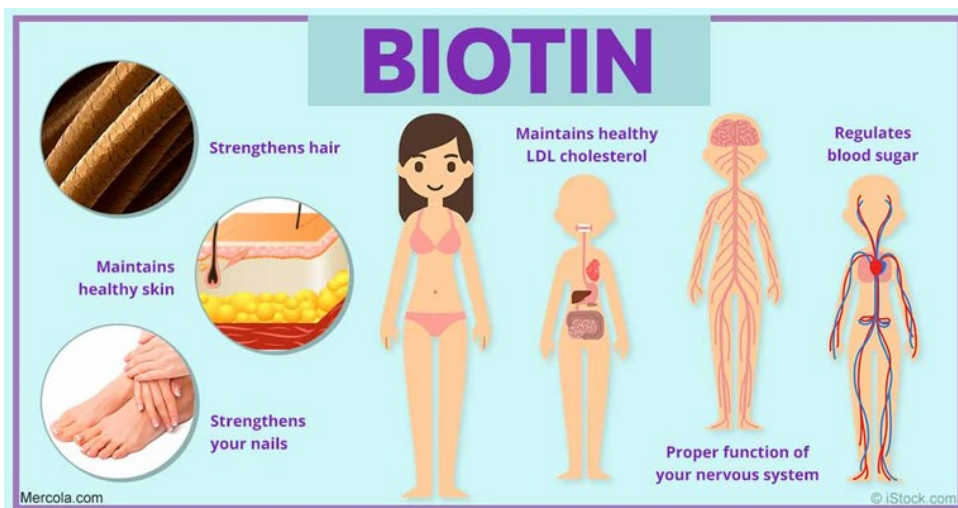
Sunflower seeds: 66 mcg

Green peas/lentils: 40 mcg

Peanuts/walnuts: 37.5 mcg

Pecans: 27.75 mcg

Eggs: 18.9 mcg



### **Deficiency**

Biotin deficiency is rare as it is required in relatively small amounts. Furthermore a wide range of foods contain biotin, and intestinal bacteria synthesize biotin, which then can be absorbed.

Raw egg whites contain a protein (avidin) that blocks the absorption of biotin, so people who regularly consume a large number of eggs may become biotin-deficient.

The vitamin is crucial for normal fetal development and a deficiency during pregnancy can result in birth defects such as cleft palate.

Symptoms of biotin deficiency include brittle nails, hair loss, muscle pain, nausea, fatigue, anemia, and dry skin.

### **Resources:**

<https://en.wikipedia.org/wiki/Biotin>

[http://www.health.harvard.edu/staying-healthy/listing\\_of\\_vitamins](http://www.health.harvard.edu/staying-healthy/listing_of_vitamins)

<http://www.globalhealingcenter.com/natural-health/top-foods-high-biotin>

<https://media.mercola.com/ImageServer/Public/2016/November/signs-symptoms-biotin-deficiency2-fb.jpg>

