



**THE SOCIETY OF
MUSCULOSKELETAL
MEDICINE**
putting theory into practice

Relevant references obtained during the last year; Foundation in Musculoskeletal Medicine module

Foundation (general)

On our Foundation courses, we have a lecture discussing the importance of lifestyle factors. This interesting review by Littlewood et al 2023, looked at the current and future management of shoulder tendinopathies. They suggest there is a growing body of evidence that highlights relevant modifiable risk factors, (particularly related to lifestyle), that warrant further consideration.

<https://doi.org/10.1093/rap/rkad086>

In the management of tendinopathy, we teach on our courses that Transverse Friction Massage (TFM) can be a useful way of obtaining an analgesic response prior to active rehab (optimal loading). This interesting randomised, controlled, cross-over trial by Chaves et al 2019, showed that TFM induces an immediate reduction in pain intensity upon palpation, regardless of the pressure performed.

<https://pubmed.ncbi.nlm.nih.gov/31575823/>

On our Foundation course, we have a lecture on the important of communication / consultation skills. The interesting review by Belton et al 2022, discusses the importance of this, especially when managing someone who has persistent pain.

https://chiromt.biomedcentral.com/counter/pdf/10.1186/s12998-022-00466-w.pdf?fbclid=IwAR251_WJp6uUvplhl3_ToemrYXjG5-vUmOZ_8S8tRKq057ddWvNQghlfoo

The guidance from NHS England below, describes the benefits of referral optimisation in adult services managing musculoskeletal (MSK) conditions, focusing on the use of specialist advice to enable people to be seen by the right person, at the right time and in the right place.

<https://www.england.nhs.uk/.../msk-orthopaedic-approach.../>

The Chief Medical Officers annual 2023 report offers a potential insight into the future of Physiotherapy. One-point highlights how multimorbidity is increasing and how the medical

profession needs to respond. Rather than specialising in individual areas, patients would benefit more from seeing a medical professional with generalist skills to better understand their multiple long-term conditions. This is something to think about in Physiotherapy. Whilst our Foundation courses focus on MSK, we have lectures on comorbidities, clinical masquerades, lifestyle factors and social prescribing. All of these would be welcomed by Chris Whitty's report

https://www.gov.uk/government/publications/chief-medical-officers-annual-report-2023-health-in-an-ageing-society/executive-summary-and-recommendations?fbclid=IwAR2iwX2s_1BWTCZRfTD8CtHR8ojDsu93Aj82qTplupbPolSt8j1kGi1WAG8

Interesting blog by Cook 2023 entitled 'Disentangling the Truth About Manual Therapy'. I like the examples given about the 'Illusory Truth Effect'. The illusory truth effect is a cognitive bias in which people tend to believe that a statement or claim is true if they have encountered it repeatedly, even if it is false or lacks evidence to support it.

https://sites.duke.edu/cemmt/2023/10/31/disentangling-the-truth-about-manual-therapy/?fbclid=IwAR0k4SUrecu86LU_dJ96yngugX5kk-0tiPUP7lvPEG6QVmrYTOClAT2Yy-s

Over the last few years, we have included a lecture on the importance of lifestyle factors in our Foundation courses. The recently published article from Gibson et al 2023 concludes that an unhealthy lifestyle was associated with a marked increased risk of admission to a nursing home in adults aged 60+ years. Interventions focused on lifestyle modifications may prevent or delay nursing home admission.

https://jech.bmj.com/content/77/11/744?fbclid=IwAR08U394wiJ42PkoZVOv10kWuPL3qzs_IUai47JZLZJw9P8i4jtcOrPR9k

When teaching injections, we often advocate the use of Triamcinolone Acetonide (TA) as our steroid of choice. The interesting prospective study from Eason et al 2023 lends support to this choice.

https://www.sciencedirect.com/science/article/abs/pii/S1058274623004627?fbclid=IwAR3YncZgbdob56-1O5wFd7_zutp2HHXx2f9cEOL3xq-CEoADr_37NozaSow

We all know the huge benefits of physical activity and exercise, the recent overview of systematic reviews from Singh et al 2023, outlines its importance in the management of anxiety, depression and psychological distress

https://bjsm.bmj.com/content/bjsports/early/2023/03/02/bjsports-2022-106195.full.pdf?fbclid=IwAR3_PmX2vRamaJ5jlkT3pJkaSqwzsPyjhPMwW--TN-gMbbhYJOag5zju5Hg

The recent meta-analysis of RCT's from Weng 2022, concluded that exercise has similar effects on pain and function to that of oral NSAID's and paracetamol for hip and knee OA. Given its excellent safety profile, exercise should be given more prominence in clinical care, especially in the older population with comorbidity or higher risk of adverse events related with medication.

<https://bjsm.bmj.com/content/bjsports/early/2023/01/02/bjsports-2022-105898.full.pdf?fbclid=IwAR1EvDyNj2qa8FzEupxiYuci4KAJvFRPjg0LwLWYvf3RowvvdwKHd6XM1-kY>

An interesting and important paper from Zhaoyang 2020 if you want to help people function better, reduce pain and improve their quality of life

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7572728/pdf/nihms-1603305.pdf?fbclid=IwAR1TxhpnOj7RMEwGgl_I2xegzA3quwJO8H5YLLmzmQ8iOI9HUS37bHrPZnk

Foundation Unit 1

Frozen shoulder can be a difficult condition to treat. In the irritable and 'frozen' phase, SOMM often advocate CSI as a treatment option. This interesting, and recent prospective, RCT by Swaroop et al 2023, compared CTI to hydrodilatation with CSI. Both groups improved but interestingly, at 6 weeks and 3 months, better outcome were found in CTI only group. This is in keeping with what we teach on the Foundation Unit 1 and Injection Therapy courses.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10103915/>

Interesting little article from Luks 2024 about shoulder pain. It's interesting that included in the discussion is the impact of metabolic health and lifestyle factors on rotator cuff health. This could be a useful resource to mention doing this lecture

<https://www.howardluksmd.com/how-to-maintain-a-healthy.../>

Interpreting article Boland et al 2021, around the current concepts in the rehabilitation of rotator cuff related shoulder pain (RCRSP). The authors concluded that exercise-based rehabilitation for RCRSP should be person centred and promote self-efficacy. Beliefs and expectations should be explored, expertise in communication skills is essential here. Individualised education should be provided to address any potential barriers, such as a strongly biomedically based understanding of RCRSP. Clinicians should use their rehabilitation expertise to plan an exercise-based program in conjunction with the individual with RCRSD, which is regularly reviewed and adjusted. Those who fail to improve following 12 weeks of exercised-based rehabilitation should have access to shared decision-making regarding their ongoing management, with input from across the MDT as required. All of these points are in keeping with the recommendations we give on our Foundation Unit 1 course.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8082254/pdf/main.pdf?fbclid=IwAR1wi8JAEBoaf8lhfxNDbKF1a2fjq1uggmeeenWC8QRZWyunoX9m-S5-M9I>

Interesting article from Chean et al 2022, looking at subacromial injections. In conclusion, placement accuracy of US-guided subacromial corticosteroid injection via the anterolateral approach in SAPS did not influence pain and function outcomes. Given the widespread availability of

practitioners to perform unguided injections in primary and secondary care, the findings suggest that subacromial corticosteroid injections can be performed without US guidance.

On SOMM courses, we teach anatomically guided injections -this article would appear to be in support of this approach for subacromial injections.

<https://pubmed.ncbi.nlm.nih.gov/35316556/>

On a Unit 1 we discuss the anatomy of the wrist and hand and this includes the palmaris longus muscle. The article from Olewnik et al 2017, below discusses the anatomical variations of the palmaris longus including its relation to the median nerve and they suggest a proposal for a new classification

https://bmc-musculoskeletal-disorders.biomedcentral.com/counter/pdf/10.1186/s12891-017-1901-x.pdf?fbclid=IwAR3YncZgbdob56-105wFd7_zutp2HHHx2f9cEOL3xq-CEoADr_37NozaSow

On our courses we teach Corticosteroid injections as a treatment option for Carpal Tunnel Syndrome (mild-moderate severity). Yang et al 2021 produced an interesting systematic review and meta analysis of RCT's comparing landmark guided injection and US guided.

https://www.nature.com/articles/s41598-021-89898-7?fbclid=IwAR3N_I05GQPrvc80uOPkdjovApcALmB_MMBiKfK5zdVZZbsdNvu3lPI_474

Foundation Unit 2

Interesting systematic review with meta-analysis from Sorenson et al 2023. They concluded that targeting a specific vertebral level when administering spinal manipulation for patients with nonspecific low back pain did not result in improved outcomes on pain intensity and patient-reported disability compared to a nontargeted approach. The spinal manipulation SOMM teach is non-specific (not targeted at a specific level).

<https://www.jospt.org/doi/epdf/10.2519/jospt.2023.11962>

The case study shows the rare side effect of lipoatrophy following a cortico-steroid injection around the trochanteric bursae. Whilst this is rare, it's something to be aware of in order to obtain full informed consent from patients prior to injection therapy.

[https://hjdbulletin.org/files/archive/pdfs/BHJD%2081\(4\)2023%20pp%20285-288%20Lin%20et%20al.pdf?fbclid=IwAR2FiKwkw1_ww9dg40eG4WHqg4pqfLad_7U_rOAvxTt1lXDQo_Bu8ReasRPM](https://hjdbulletin.org/files/archive/pdfs/BHJD%2081(4)2023%20pp%20285-288%20Lin%20et%20al.pdf?fbclid=IwAR2FiKwkw1_ww9dg40eG4WHqg4pqfLad_7U_rOAvxTt1lXDQo_Bu8ReasRPM)

The WHO provides guidelines focused on CPLBP in adults in primary and community setting and provides evidence-based recommendations on treatment options to support adults with CPLBP. The

four guiding principles: i) holistic and person-centred care; ii) equity; iii) care that is non-stigmatizing and non-discriminatory; and iv) integrated and coordinated care.

Target audience is: clinicians of all disciplines working in the primary and community care settings, as well as public health programme and system managers.

<https://iris.who.int/bitstream/handle/10665/374531/9789240085558-eng.pdf?fbclid=IwAR2gtq8J1UVF9kW9zEjKuCcKdujyly-ju9lpqEWuh8Ofs0bxseae48crn4M>

Intra-articular corticosteroid (IACS) injections for knee OA are a common form of treatment and one that SOMM teach on both the Foundation and Injection therapy courses. This interesting, recent systematic review with meta-analysis Ibad et al 2023 concluded that IACS use may contribute to imaging features of knee cartilage loss. Further studies are warranted to investigate the underlying pathogenesis.

We would not advocate stopping using IACS for knee patients, however, this paper does add some weight for the need to be appropriately selective in the patients we suggest this treatment for. As always, sound clinical reasoning and judicious patient selection is key before administering steroid injections.

https://www.sciencedirect.com/science/article/pii/S2772654123000740?fbclid=IwAR0EmOVQufc7tIJ1bIEh_Oa7B1yicDBe2XN6OvKGxKh27f4H72g3LA2Zfnw

Interesting article from Schmid et al 2023 looking at the terminology of neuropathic pain in people with spine related leg pain. This is a topic we discussed on the recent Foundation Unit 2 as it can get complicated with all the different terminology out there.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10348639/>

Should Opioid pain relievers be prescribed for new episodes of low back and neck pain? Not according to the recent RCT from Jones et al 2023. Professor Lin, who was the senior author on the study added '

'Lower back and neck pain can severely impact patients' quality of life, so we need to offer them the best options to help manage their pain, but opioid pain relievers do not work and carry serious risks. Instead, doctors should be encouraged to focus on patient-centred approaches that could include advice to stay active, and simple pain relievers. The good news is most people with acute low back pain and neck pain recover within 6 weeks naturally.'

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(23\)00404-X/abstract?fbclid=IwAR35R2KsOaI3DBhZq4vp2N5N1shxGvdk1J6uZ0pLj36EGpggTikRRA8IT8](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(23)00404-X/abstract?fbclid=IwAR35R2KsOaI3DBhZq4vp2N5N1shxGvdk1J6uZ0pLj36EGpggTikRRA8IT8)

There was a recent systematic review and meta-analysis looking at the diagnostic accuracy of clinical tests for ACL tears (see below from Sokol et al 2022). The results may surprise you?

https://link.springer.com/article/10.1007/s00167-022-06898-4?fbclid=IwAR3SFG4e2F0s21LZUhTuVHfh6ToqjSi1hJpTf8Mrifod5LE_JrnU8IBCELO

A recent systematic review and meta-analysis from Horan et al 2023 looked at the injury incidence rates in women's football. They concluded that lower limb injuries incurred during matches are a substantial problem in senior women's football. The prevention of lower limb joint, ligament, muscle and tendon injuries should be a central focus of injury prevention interventions in senior women's amateur club, elite club and international football.

<https://pubmed.ncbi.nlm.nih.gov/36229168/>

Interesting systematic review from Wewage et al 2023, recommending patients and clinicians take a cautious approach to manage acute non-specific low back pain with analgesic medicine.

https://www.bmj.com/content/380/bmj-2022-072962?fbclid=IwAR0k4SUrecu86LU_dJ96yinsugX5kk-OtiPUP7lvPEG6QVmrYTOClAT2Yy-s

The research conducted below by Hall et al 2022, shows that 48% of the general public felt that back pain will progressively get worse over time. It also showed that 49% agreed that having back pain means you will always have weakness in your back

Patient education with low back pain is SO important and this research further supports this

<https://pubmed.ncbi.nlm.nih.gov/33832463/>

For those of you who treat ankle sprains, the evidence based clinical guideline from Vuurburg et al 2018, will be worth a read

https://bjsm.bmj.com/content/bjsports/52/15/956.full.pdf?fbclid=IwAR0EmOVQufc7tIJ1blEh_Oa7B1yicDBe2XN6OvKGxKh27f4H72g3LA2Zfnw

The results of a very interesting blinded RCT by Rajasekaren et al, 2021 concluded that Routine MRI reports produce a negative perception and poor functional outcomes in LBP. Focussed clinical reporting had significant benefits, which calls for the need for 'clinical reporting' rather than 'Image reporting'.

<https://pubmed.ncbi.nlm.nih.gov/33748882/#:~:text=Conclusion%3A%20Routine%20MRI%20reports%20produce,rather%20than%20'Image%20reporting'>