

Physio Thoughts

If only we could streamline our health services, with recommendations of direct access to physiotherapy in the national news recently it raises a lot of questions about the current system. In my opinion there needs to be a Physio triage option. It would differentiate between those requiring physiotherapy and those that require a GP or Consultant investigation. Often patients just need some advice and exercises to speed up their recovery.

In private practice we do just that. Clients often come directly to us and this produces a highly successful rate of recovery. They are seen quickly, given the correct advice, exercises and treatment if required, enabling a fast recovery and lower incidence of a chronic problem developing, less time off work and less impact to the client. It also saves a trip to the GP, therefore more money saved for the NHS.

This is such a successful service it seems a shame the NHS is unable to offer a similar pathway of care. Great physio triage would consist of an MSK assessment. It would offer first line advice and exercises and identify those who would benefit from Physiotherapy. It would also highlight those that need further GP or Consultant investigations. Often correct advice and exercises can make a huge difference especially if they would otherwise be sat becoming chronic on a waiting list.

If this is a service that interests you and you'd like to discuss with us please drop me an email.

Jane

Physio spotlight

Last summer Joanna moved down from Staffordshire to Petersfield returning to her roots and family. She started working for Backtogether physiotherapy in August 2015 and has quickly become a very valued part of the team. Jo graduated from Keele University in 1999 and spent several years working within the NHS in hospitals and GP practices specialising in musculoskeletal and rheumatological conditions. She is currently studying for a Post Graduate Diploma in ergonomics. She is also qualified in Acupuncture which compliments her Physiotherapy treatments for musculoskeletal problems.

Jo enjoys conducting ergonomic assessments in factories, offices, homes and peoples cars. Minor ergonomic alterations can make a huge difference to someone's comfort or pain levels whilst at work or driving.

Jo is a very keen hockey player and has played hockey at a high level herself as well as treating high-level players in the Staffordshire area. She now plays for Havant.



Welcome to our first edition of our Newsletter for Medical Professionals. We aim to share our news, current thoughts, successes and knowledge. We hope you find this interesting and educational. If there are any topics you would like us to cover please let us know. We are also happy to come and teach or discuss any topics with you or your team.

Jane Grainger, Alan Mowatt,

Becky Potts, Joanna Hounsome, Ruth Murray

Neurodynamics

describes the way that nerves move, guide and the mechano sensitivity of the neural tissue.

The **mechano sensitivity** of the nerves is affected by their anatomy – the position of the nerves in relation to the axis of the joints, the surrounding tissue health (scar tissue, odema, general poor tissue quality) and any entrapment or impingements (e.g. nerve root compression, disk bulges).

Any change in the way the nerve is able to move or glide can affect the sensitivity of that nerve and cause pain or symptoms along its pathway. The classic example is disk protrusion and sciatica but other common examples are **tennis elbow, carpal tunnel, calf pain**, the list goes on.

The **disk bulges**, and nerve root impingement are obvious and common causes of adverse neural tension (ANT) but many of the symptoms caused by ANT are commonly missed. If you have restriction in your **Thoracic spine** (general joint stiffness) then your neural system may not be gliding freely, causing sensitisation which can cause all types of neural pains through lower limbs or upper limbs (tested with the slump test).

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Neurodynamics continued

A hamstring tear can cause scar tissue that impedes the glide of the sciatic nerve. The muscle may be completely healed but the **pain** continues along the back of the thigh and into the **buttock** due to the reduced mobility of the nerve. Or the tension through the upper traps and stiffness of the first rib can affect the glide of the brachial plexus - this can affect the mechano sensitivity of the nerves and increase the sensitivity of the median nerve which may be presenting as carpal tunnel syndrome.

Treatment of **Neurodynamic dysfunction** (ANT) is to improve the health and mobility of the nerve. Its sensitivity needs to be reduced and its ability to glide unconstrained within its sheath is paramount.

How to test for Neurodynamic Dysfunction

There are tests to measure the glide of the neural tissue. The SLR is an example that everyone knows- it tests the ability of the sciatic nerve to glide freely and painlessly. It is possible to then tension up the neural system in such a way that you can isolate specific branches e.g. common peroneal nerve.

Upper Limb Tension Test - Radial

Assess the neural glide capacity of the radial nerve (Lateral elbow pain, thumb etc)

- Patient supine, small or no pillow
- Depress shoulder
- Medially rotate arm
- Flex wrist and fingers
- Abd shoulder
- Can increase or decrease tension using Cx



Upper Limb Tension Test - Median

Used to measure the level of involvement of the median nerve in the patients symptoms e.g. carpal tunnel. Can also be associated with cervical radiculopathy.

- Patient supine, small pillow or no pillow.
- Stand on side of testing
- Depress shoulder and maintain the depression
- Abd shoulder to 90 deg
- Flex elbow 90 deg
- Lat rotate shoulder to end of range
- Supinate forearm
- Extend wrist and fingers
- Can increase or decrease tension with Cx position (neutral or side flex)



SLR

Commonly used to diagnose a herniated lumbar disc. It can however be used to examine the neural glide and referred pain along the whole pathway. Commonly used to investigate ongoing buttock pain, ankle sprains and pains, calf pains or unresolving hamstring pain. A positive SLR reproduces symptoms. This can be further investigated by tensioning or detensioning above or below the symptoms.

- Patient flat on couch. No or small pillow under head
- Tension nerve by fixing foot into doors flexion, fix knee into extension
- Slowly flex hip until symptoms occur
- Can add Med rot, adduction, ankle inversion depending on area investigating

Slump

Similar to SLR but in sitting. It includes the Thoracic and Cervical spine. It looks at neural tension through the upper spine as well as Lumbar.

- Patient sitting on edge of couch hands behind back
- Ask patient to slump then slowly flex Cx. Place hand on head/ neck/ upper Tx to hold in place.
- Slowly extend one knee then add in dorsiflexion.
- If positive then ask patient to extend neck. - Looking for reduction in symptoms with cx ext
- Can bias tensioning to investigate ankle, calf etc

TIPS

- Always check both sides - you are looking for a difference
- Positive SLR is due to the increased sensitivity of the system - look for the positive crossover - SLR of the opposite side reproducing symptoms is indicative of a disk prolapse
- Do not push too hard or be heavy-handed - neural pain is often latent and nearly always very sensitive -you do not want to stir up pain
- Add in the component slowly and one at a time, generally working proximal to distal (distal tensioning is much stronger)