

**Results:** Results showed that health professional diagnoses of low back pain in referral letters were often subsequently identified by pain specialists as pain arising from the hip, sacrum, pelvis and buttock. In particular, Sports physicians and Neurologists/Neurosurgeon/Orthopedic surgeons were the most likely to correctly refer patients for low back pain approximately 50% of the time ( $W=0.550$ ,  $p=0.003$ ,  $W=0.500$ ,  $p=0.001$ , respectively). General practitioners demonstrated a unanimity with the pain specialist 40% of the time ( $W=0.442$ ,  $p=0.00$ ). Small sample numbers for Osteopath and Physiotherapist referrals prevented conclusive results, however the trend suggested that Osteopaths were the least concordant of all the referral groups ( $W=0.00$ ,  $p=0.830$ ), whilst physiotherapists demonstrated the greatest agreement ( $W=0.750$ ,  $p=0.317$ ).

**Discussion:** These findings suggest that low back pain is often misdiagnosed, and can result in increased costs to both the patient and society with limited therapeutic benefits. Improvements in low back pain education are imperative for enhanced patient care across the medical specialties.

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**O69**

### What is Joint Hypermobility Syndrome and what can be done for it?



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The Ehlers–Danlos syndromes (EDS) are a group of connective tissue disorders and are typically characterized by joint hypermobility, skin hyperextensibility and tissue fragility. Joint hypermobility syndrome (JHS) is a condition of EDS where joints readily move beyond the normal range expected for that particular joint. Symptoms of JHS include pain in the knees, fingers, hips, and elbows.

Consequences of JHS include:

- Poor Collagen: Collagen is too stretchy, poor sphincter function, poor ground substance, leaky cell junctions in gut and blood vessels, local anaesthetic often does not work
- CVS: Cardiovascular complications due to excessively compliant venous circulation causing venous pooling when upright and orthostatic intolerance:
- Gynaecological: Dysmenorrhoea (usually severe and usually from Menarche), Prolapses
- GIT: IBS, reflux, post-prandial bloating
- Skin: Atopic and food allergies
- Sleep: Poor Sleep/OSA
- Cardiovascular: Excessively compliant venous circulation causing venous pooling when upright:
  - Low BP with high pulse pressure between systolic and diastolic
  - Headache (often Migraines)
  - Pounding in ears
  - Heat Intolerant
  - Crave salt
  - Nocturia (xs fluid intake during day or inadequate renal perfusion when upright)
- Orthostatic Intolerance: Postural hypotension (often diagnosed as POTS), anxiety (due to adrenergic response to inadequate BP), fatigue (often diagnosed as CFS, due to adrenal exhaustion), agrophobia
- Varicose veins

This presentation will discuss JHS and offer insight into available treatments.

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**O70**

### Prolotherapy in the treatment of pelvic instability



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**Introduction:** Prolotherapy is a therapy that has been used for over 60 years in various joints. We provide results of a study conducted on patients suffering from Pelvic Girdle Pain to determine the success of prolotherapy in this cohort of patients.

**Method:** 131 patients with clinically assessed pelvic girdle instability and pain received injections of hypertonic glucose into their damaged ligaments under fluoroscopy. The injections were repeated, on average three times, at 6-weekly intervals. In addition, the participants attended follow-up assessments at 6 and 12 months post-treatment. The study measured patient outcomes using clinical histories and patients' self-reported responses using the following metrics: back, hip and pelvic strength, the level of pain relief, the level of disability, patient satisfaction and analgesic use.

**Results:** 66.7% and 73.5% of patients at 6- and 12-months respectively reported improvement in back, hip and pelvic strength. 56% and 59% of patients observed overall pain relief of >50% after 6 and 12 months. The increase in pain relief directly correlated with improved strength ( $r=0.82$ ;  $p \leq 0.01$ ). Of the patients taking analgesics to manage their pain, almost half reduced their analgesic use following treatment.

The patients also scored a significant reduction in the Oswestry Disability Index (ODI) post prolotherapy at the 6-month timepoint. The reduction in disability of patients was further sustained at 12-months. Approximately 70% of patients on average were satisfied with their treatment outcomes.

**Discussion:** Prolotherapy is a useful treatment option providing good pain relief and increased stability to patients suffering from Pelvic Girdle Pain

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**O71**

### Consequences of pelvic instability



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Ligamentous instability is a commonly missed cause of pelvic pain. It arises from multiple causes including pregnancy, trauma and connective tissue disorders and can result in many of the common presentations seen in the pelvis; including tendinopathies, SIJ joint pain, nerve entrapment and stress fracture. In this talk, how to identify pelvic ligamentous instability will be discussed and current treatment options reviewed.

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