Neurosurgery and Workers Compensation

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WHO are WorkSpine

• Multi-disciplinary team providing comprehensive occupational spine injury management

• Broad expertise in adult spinal surgery

• Particular interests
  ➢ MIS / mini-open lumbar fusion
  ➢ Reduce muscle trauma
  ➢ Reduce post-op pain, hospital stay
  ➢ Earlier recovery & return to normal activities
  ➢ Cervical and Lumbar artificial disc replacement
  ➢ Dynamic spinal stabilisation
  ➢ Vertebral cement augmentation
  ➢ Brainlab Airo Mobile Intraoperative CT (Airo)
Guardian

• Occupational Physiotherapy
• Exercise Rehabilitation
• Workplace Rehabilitation
• **Looking at pain in a multi dimensional way**, including its physicality, emotional aspects, the way we think about pain, and how we interact with people in respect to our pain.

• **Aspects of treatment may be an emotional and Cognitive Therapy Approach**

• Pain relief - holistic treatment programmes get results
WHY WorkSpine

• Literature suggests poorer outcome following spine surgery in WC patients
  ➢ RTW rates 25 – 35%
  ➢ High rates opioid dependence 2 years after surgery
  ➢ Higher re-operation rates
  ➢ Higher disability rates

• WHY is the outcome worse in WC patients?
  ➢ Same operation as in privately insured patients
  ➢ Same pathology as in privately insured patients
  ➢ Generally, privately insured patients have a good outcome and RTW at pre-injury duty level
WHY WorkSpine

• Multifactorial causes for difference in outcome for same surgeries
  ➢ Behavioural issues, chronic pain behaviour, associated depression, anxiety, anger
  ➢ People who blame their employer less likely to have satisfactory outcome
  ➢ 2° gain; legal involvement; adversarial environment
  ➢ Influence of the Payer in the Doctor-Patient relationship that doesn’t occur in private practice- NOT a criticism but important to understand the potential consequences on outcome
  ➢ Very few things are certain or absolute in Medicine generally and even more so in spine surgery
WHY WorkSpine

- Multiple opinions sometimes contradictory
  - IMEs requested by insurer vs. patients legal representative
  - Bureaucratic delays that can impede treatment

- A renowned US Rheumatologist stated in regard to WC patients: “It is hard to get well if you have to regularly prove that you are sick”

- Delays in treatment
  - Frustration and resentment
  - Can result in worse outcomes
WHY WorkSpine

• How can we improve outcomes in WC patients?

➢ Multidisciplinary Clinics and “Functional Restoration”
  • Pre- and post-operative intensive supervised exercise rehabilitation
  • Clinical psychology review in selected cases
  • Pain specialists
    • Focused interventions for treatment and/or diagnosis
    • Assistance with supervised narcotic withdrawal or narcotic use minimisation
    • Close liaison with surgeons
  • Occupational Physicians
    • Assessment and monitoring of Return to Work goals

➢ Surgical Factors
Supporting Evidence

Lumbar surgery in work-related chronic lower back pain: can a continuum of care enhance outcomes?

- 564 patients: lumbar fusion (F group, N=331); nonfusion lumbar spine surgery (NF group, N=233); unoperated group (U group, N=349)

- All patients completed an intensive, medically supervised functional restoration program: quantitatively directed exercise progression; multimodal disability management approach (clinical psychology, narcotic withdrawal, support and encouragement with RTW)

- Few statistically significant differences for any socioeconomically relevant outcome among groups, with virtually identical post-rehabilitation return-to-work (F=81%, NF=84%, U=85%)

- Lumbar surgery in the WC system has the potential to achieve positive outcomes comparable to patients treated nonoperatively with early referral of patients to interdisciplinary rehabilitation

Supporting Evidence

Socioeconomic outcomes of combined spine surgery and functional restoration in workers’ compensation spinal disorders with matched controls.

- Study comparing functionally restored discectomy (n = 123) and fusion (n = 101) workers compensation patients to unoperated control patients

- Functional Restoration Program
  - interdisciplinary program using quantitatively directed exercise progression, psychotherapeutic interventions, and monitoring of specific socioeconomic outcomes for chronically disabled workers

- All groups demonstrated a return-to-work incidence of more than 85%

- Despite the common presumption that spine surgery patients fare poorly in a workers compensation environment, these results demonstrate that such patients can show remarkably successful objective outcomes if accompanied by effective rehabilitation

A New Clinical Approach- WorkSpine

• Initial assessment prior to consultation

  ➢ Tablet based questionnaires

  ➢ Surgical outcome scales
    ➢ VAS, Oswestry, NDI, SF-36 equivalent
    ➢ Measured pre-operatively, 3-months, 12-months
    ➢ Ultimately validate the WorkSpine concept
A New Clinical Approach - WorkSpine

• Initial assessment prior to consultation

- Tablet based questionnaires
- Psychological Evaluation
  - Kessler Psychological Distress Scale (K10): 10-item questionnaire designed to give a global measure of distress based on questions about anxiety and depressive symptoms
  - Orebro Musculoskeletal Pain Questionnaire (OMPQ): “yellow flag” screening tool that predicts long-term disability and failure to return to work
  - Identifies patients who would benefit from referral to Wisdom Health for psychological evaluation/treatment
A New Clinical Approach- WorkSpine

• Surgeon determines management plan:-
  ➢ Further diagnostic work-up
  ➢ Referral to DH for pain management interventions
  ➢ Surgical options
  ➢ All patients referred to Guardian Exercise Rehabilitation preferably pre-operatively
  ➢ Selected patients referred to Wisdom Health
    ➢ Identified by practice nurse prior to consult and surgeon advised
  ➢ Selected patients referred to OccuMED

• Report to GP, Employer and Insurer
A New Clinical Approach - WorkSpine

• Close working relationship with Interventional Pain Specialist, Dr David Holthouse

  ➢ Advantage over CT guided FJI / NRSI by Radiologists
    ➢ Single level / single pathology
  ➢ Pain often
    ➢ Multi-segmental
    ➢ Mono-segmental but multi-pathology e.g. discogenic + facetal + neural compression
  ➢ Under one anaesthetic
    ➢ Multiple injections targeting multiple pathologies at multiple levels
    ➢ Increased chance of efficacy
Summary

• Multi-disciplinary approach WORKS
• Surgery techniques can affect recovery time
• Early referral to include or exclude Surgery allows Worker to move forwards

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Coordinated treatment planning
Better workers compensation patient outcomes
WorkSpine gets spines working