

Case 2

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bearbeiten

Argospine 2010
Controversial Round table
Fusion versus Arthroplasty in the treatment of
degenerative cervical spine including cervical stenosis

Clinical presentation

- Mr B, 43 years, 1.79 m, 87 kgs - London City trader
- Severe ski trauma in 1996: subsequent tetra paresis for 5 minutes with complete recovery. No further investigations performed at that time.
- 12/2003: Progressive upper right then left limb dysesthesia and disability. Associated walking difficulties and increasing fatigue during sports exercise
- Clinical examination: Typical uni lateral pyramidal syndrom, upper limbs bilateral hyper reflexes unilateral positive left Hoffman test. Positive unilateral left Babinski test. Painfull motion of the cervical spine.

Preop MRI

- Cervical stenosis
- Multiple hypersignals of myelomalacy in C3-4, C4-5, C5-6 and C6-7
- C5-6 left side disk hernia

Additional investigations

- EMG: normal
- Evoked potentials (SSEP): normal
- Neurological examination: no neurological disease, inefficiency of steroidal treatment, posttraumatic pathology

What are your proposed solutions ?



What is clear?



- Spinal Cord concussion 14 yrs ago
- Complete recovery for 7 yrs
- New symptoms
 - Neck pain
 - Clinical signs of myelopathy
 - Neurologic disease excluded
- Disc herniation and Spinal stenosis C5-6 from anterior and C4-7 from posterior
- Old myelopathic intramedullary HIZ
- Advanced DDD C6-7 (Modic I or II?)

What is probable?



- HIZ do not completely explain the symptoms
- DH responsible for the new onset of neurological symptoms
- Neck pain related to DH
 - Facet joints need to be tested

What would I do ?



- x-rays + flex/ext
 - Alignment ?
 - Translational Instability ?
- Axial views MRI
 - foraminal zones?
- Lumbar puncture
 - CSF investigation
- Facet joint injections C5-6-7
 - Facet pain ?
 - From which level ?

What would I do ?



- **If no myelopathy:**
 - TDR C5-6
 - Attention : Yellow lig. hypertrophy
- If neck pain from facets C6-7:
 - Fusion C6-7 (Cage)
- If translational instability +/- kyphosis
 - Fusion C6-7
- If no Facet pain and mobility C6-7
 - TDR C5-6-7

What would I do ?



- **With myelopathy:**
- Fusion C 5-6-7
 - cages stand-alone
 - + - anterior plate ?
- No TDR
 - Myelopathy
 - Yellow lig. Hypertrophy C4-7