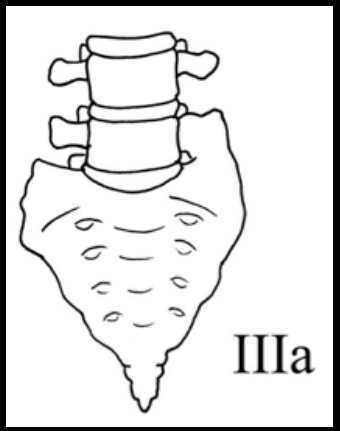
Bertolotti's syndrom

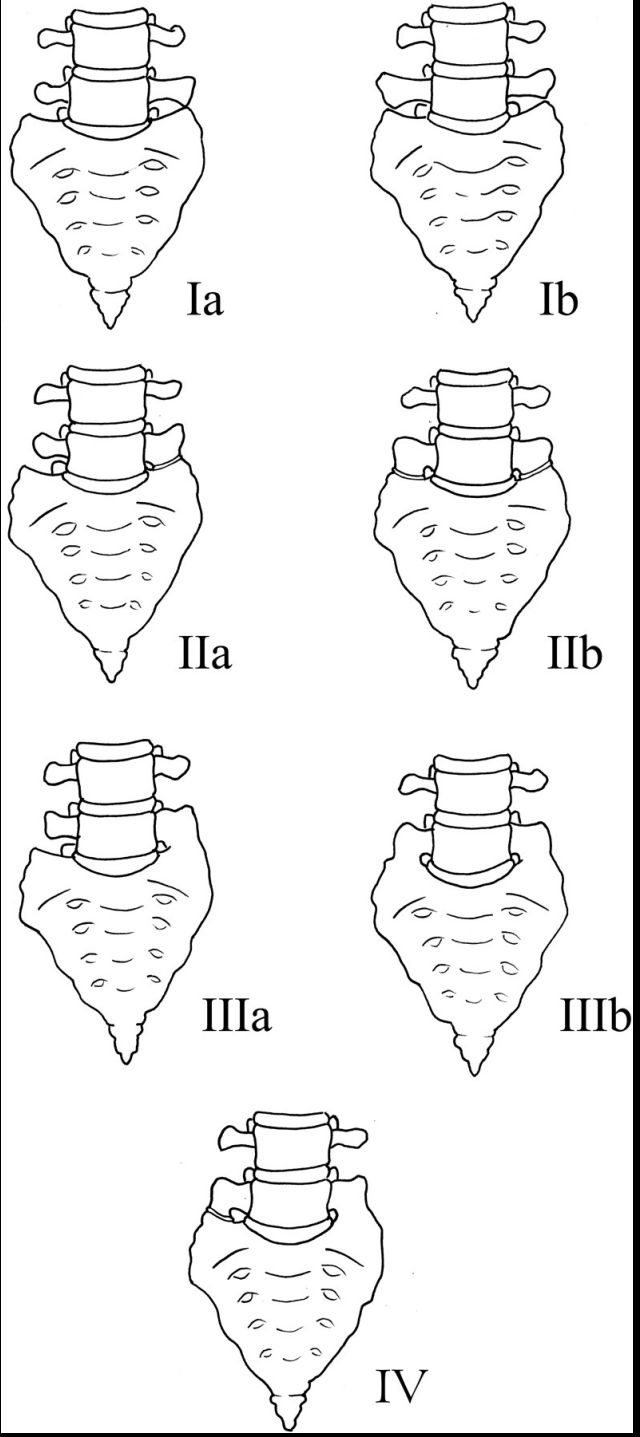
Bertolotti[1]'s syndrom

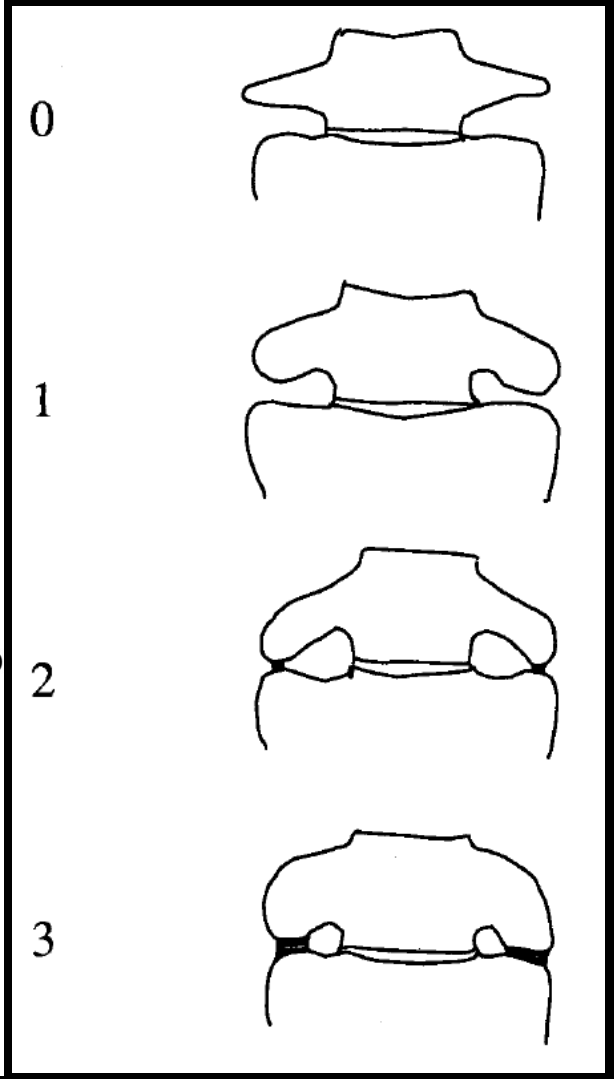
- Medfødt anatomisk variant af L5 (4-30[2] %)
- Lumbosakral overgangshvirvel
- Forstørret processus transversus (mega-apofyse), der kommer i kontakt med sacrum/ ileum og danner pseudoartrose
- Associeret med læ̈ndesmerter



1) Mario Bertolotti, Italiensk radiolog der beskrev tilstanden i 1917
2) Luoma K. Lumbosacral Transitional Vertebra. Spine 2004

Castellvi's klassifikation





I: dysplastisk PT

II: inkomplet
lumbalisation/
sacralisation

III: komplet -//-

IV: blandingstype


a
b

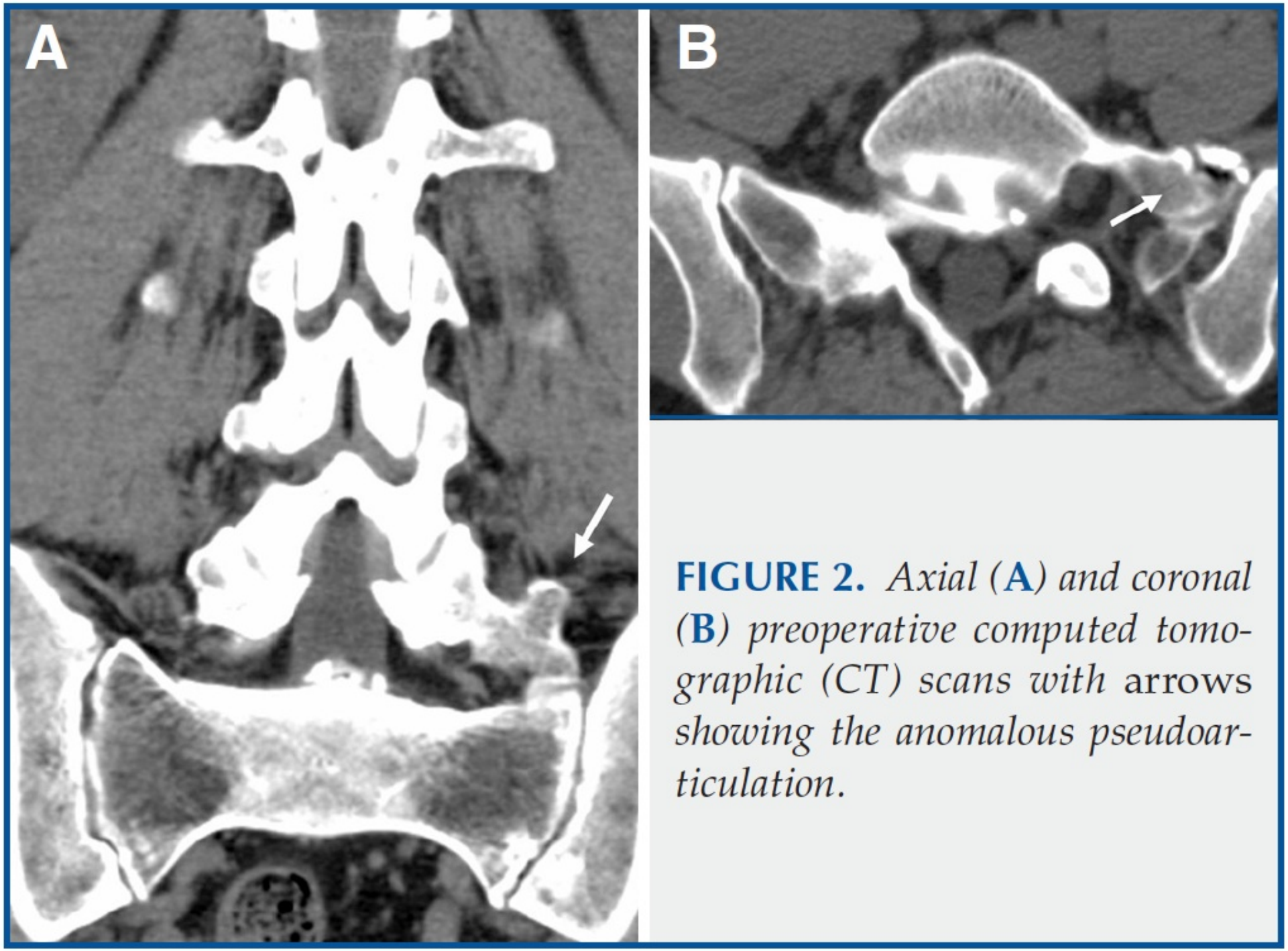
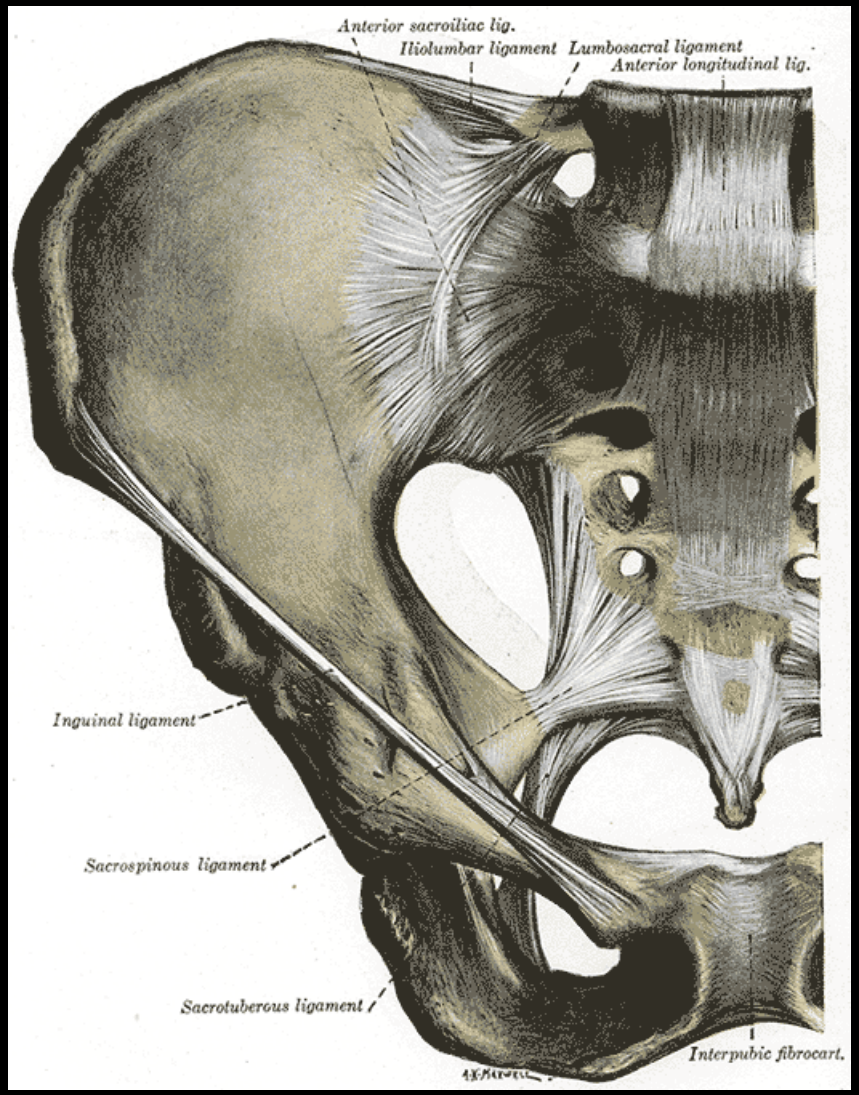


FIGURE 2. *Axial (A) and coronal (B) preoperative computed tomographic (CT) scans with* arrows *showing the anomalous pseudoarticulation.*

Symptomer

- Asymptomatisk
- Lændesmerter ved flexion/extension
- Evt. udstrålende smerter
- Forværring ved aktivitet og tunge løft
- Ømhed over sacrum
- Lændesmerter hos yngre

DDD

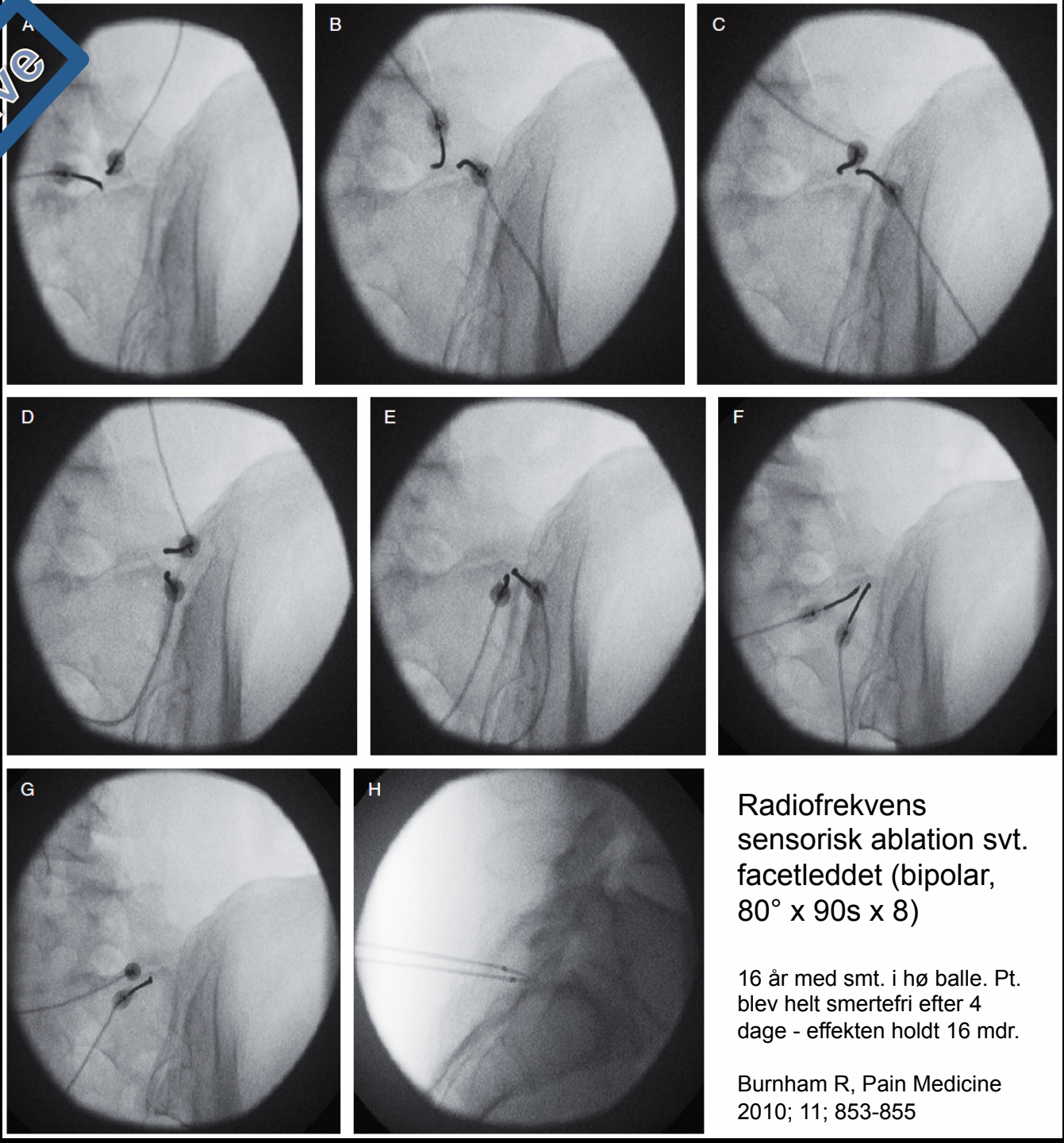


- Nederste diskus (L5/S1) er beskyttet (”antitorsions device”)
- Den øverste (L4/L5) har større tendens til degeneration (tyndere lig. iliolumbalis)

Behandling

- Ingen
- Konservativ: NASID & træning
- Minimal invasive:
  - Blokade
  - Radiofrekvens denervering
  - Resektion af PT
- Posterolateral fusion v/ DDD

Minimal invasive



Radiofrekvens sensorisk ablation svt. facetleddet (bipolar, 80° x 90s x 8)

16 år med smt. i hø balle. Pt. blev helt smertefri efter 4 dage - effekten holdt 16 mdr.

Burnham R, Pain Medicine 2010; 11; 853-855

Arch Orthop Trauma Surg (1993) 112:82–87

Archives of Orthopaedic and Trauma Surgery

Kons: 34%

Surgical treatment of Bertolotti's syndrome

Follow-up of 16 patients

S. Santavirta, K. Tallroth, P. Ylinen, and H. Suoranta

Orthopedic Hospital of Invalid Foundation, Helsinki, Finland

30%

Table 2. Results after surgical treatment for Bertolotti's syndrome

Case no.		Follow-up (years)	Severity of low back pain	Persisting episodes of sciatica	Functional low back mobility	Second operation	Disability[a]
1	Posterolateral fusion	9	0 (improved)	Yes (bilateral)	Fair	No	26% / moderate
2		9	0 (improved)	No	Normal	No	2% / minimal
3		8	5 (impaired)	Yes (right)	Normal	No	42% / severe
4		8	0 (improved)	No	Poor	New fusion	0% / none
5		7	0 (improved)	Yes (right)	Poor	No	26% / moderate
6		8	2 (impaired)	Yes (bilateral)	Good	L5–S1 disc operation	24% / moderate
7		9	3 (improved)	Yes (right)	Poor	No	48% / severe
8		17	3 (unchanged)	No	Poor	New fusion	46% / severe
9	Resektion	7	0 (improved)	No	Normal	No	32% / moderate
10		11	0 (improved)	No	Normal	No	8% / minimal
11		11	4 (impaired)	Yes (bilateral)	Poor	No	32% / moderate
12		12	3 (improved)	Yes (bilateral)	Poor	No	42% / severe
13		11	4 (impaired)	Yes (right)	Fair	L4–5 disc operation	42% / severe
14		5	0 (improved)	Yes (left)	Normal	No	8% / minimal
15		11	5 (unchanged)	Yes (left)	Poor	New resection	62% / crippled
16		4	2 (improved)	Yes (left)	Poor	Anterior L4–S1 fusion	42% / severe

[a] Classified according to the Oswestry scale (Fairbanks et al. 1980)