

Complex indication for cervical prosthesis - Clinical Case Presentation -

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Purpose

- to discuss the indication for single *versus* multiple level arthroplasty in a patient with symptomatic disc herniation at one level and asymptomatic discarthrosis at the level bellow.

Patient History

■ Pre-op findings

- 47-year old woman
- polyarthritis (operated five times at both hands and elbow).
- 2-year history of cervico-brachial neuralgia with constant pain.
- Pre-op cervical and radicular VAS reported pain = 84 and 87 respectively.
- Pre-op NDI = 24/50

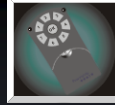
Pre-Op Findings

MRI : C4-C5 disc herniation, responsible for the symptoms.



•Plain X rays: additional C5-C6 discarthrosis.
However this level is asymptomatic.





QUESTION 1

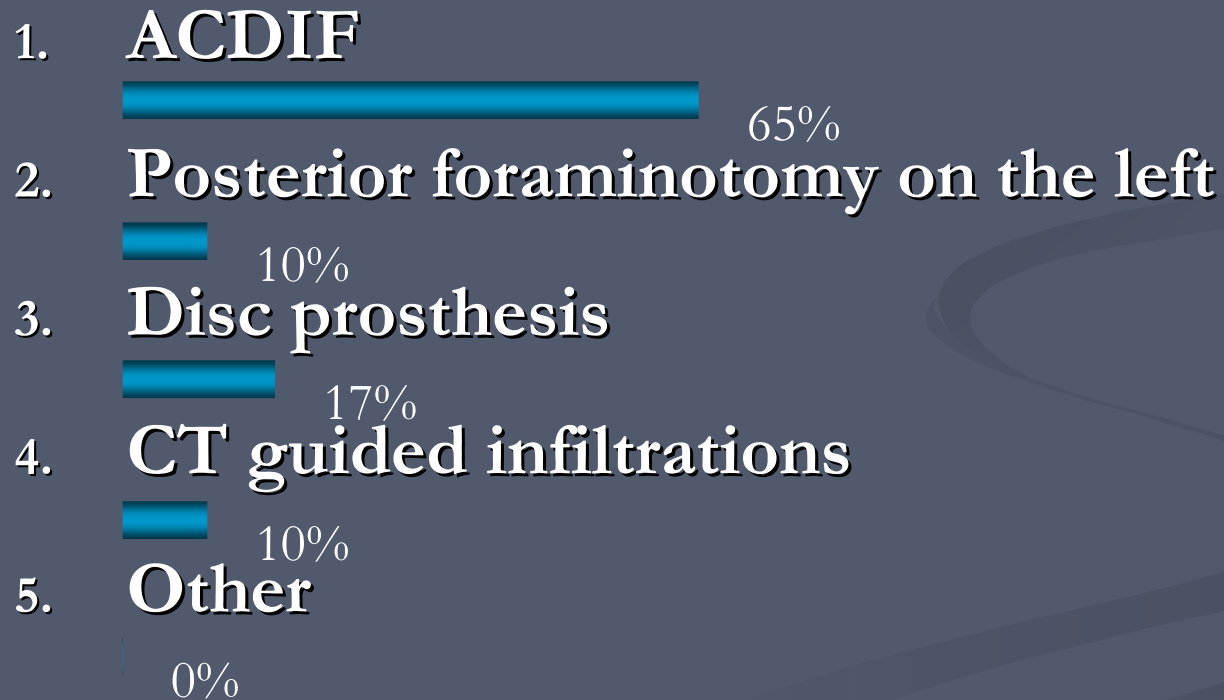
■ Surgical option ?

1. ACDIF
2. Posterior foraminotomy on the left
3. Disc prosthesis
4. CT guided infiltrations
5. Other

Single answer only

QUESTION 1

■ Surgical option ?



Single answer only

Surgery

- April 2006:
 - decompression + arthroplasty at the C4-C5 level (Discocerv, Scient'X)
 - no per-op complication



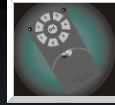
Outcome at 3 months

- 3 months Post-Op
 - cervical pain VAS= 0
 - arm pain = 3
 - NDI = 4/50



Outcome at 6 months

- 6 months Post-Op
 - cervical pain VAS=3
 - arm/shoulder pain VAS=70 !!!



QUESTION 2

■ Options ?

1. Conservative treatment
2. New MRI and dynamic radiographs
3. Functional MRI
4. ACDIF at the inferior degenerated level
5. Disc arthroplasty at the inferior degenerated level
6. Other

Single answer only

QUESTION 2

■ Options ?

1. Conservative treatment
4%
2. New MRI and dynamic radiographs
44%
3. Functional MRI
12%
4. ACDIF at the inferior degenerated level
20%
5. Disc arthroplasty at the inferior degenerated level
10%
6. Other
10%

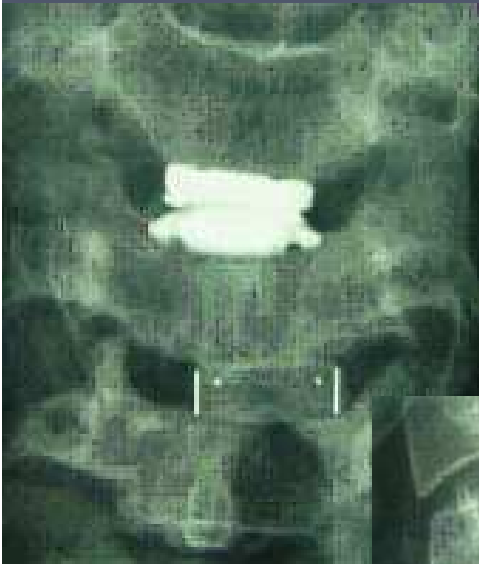
Single answer only

Our strategy

- Second surgery in December 2006 to treat the C5-C6 level (responsible for the new symptoms)
- Our first option : additional C5-C6 arthroplasty (without new MRI)
- ... but **lateral osteophytes** !!!!- against arthroplasty

Our strategy

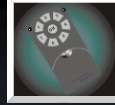
- Finally, anterior cervical interbody fusion
(interbody lordotic cage + bone graft : Samarys, Scient'X).



1 month Follow-Up

- Control at 1 month was OK
- 4 months later : **mobility** at the level of the cage, demonstrating **pseudarthrosis**
- 1 year after initial surgery:
 - **cervical pain VAS= 53 !!!**
 - **arm pain VAS= 90 !!!**
 - **NDI = 35/50 !!!**
- Conservative treatment : collar, NSAID, heat and massage





QUESTION 3

■ Your attitude ?

1. Wait and see / conservative treatment
2. Reoperation with cage removal, bone graft & plate+screws
3. Reoperation with prosthesis instead of cage
4. Remove everything and fuse both levels
5. Other

Single answer only

QUESTION 3

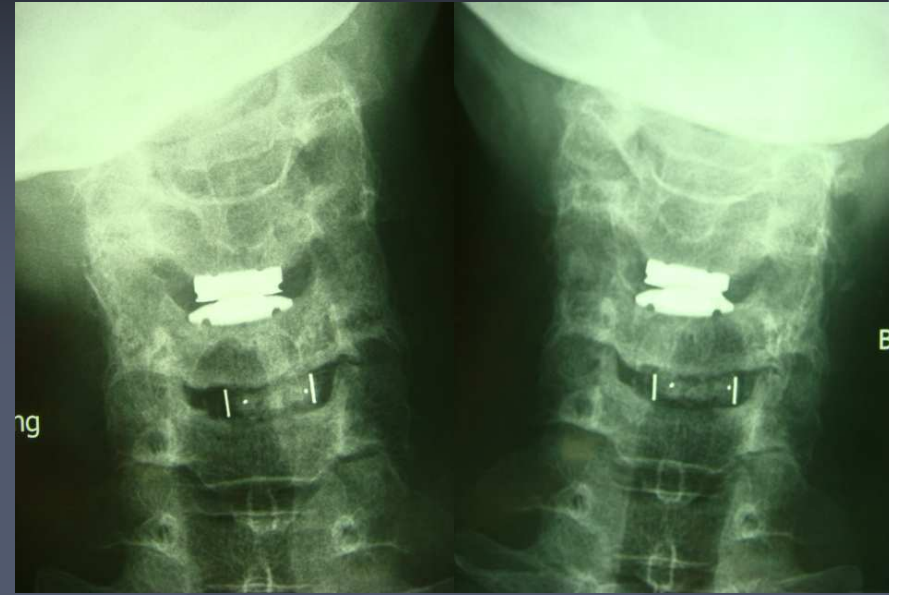
■ Your attitude ?

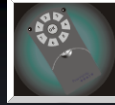
1. Wait and see / conservative treatment
17%
2. Reoperation with cage removal, bone graft & plate+screws
34%
3. Reoperation with prosthesis instead of cage
4%
4. Remove everything and fuse both levels
42%
5. Other
4%

Single answer only

Post-Op: conservative treatment

- ... but 18m after 1st surgery / 11m after 2nd surgery
 - patient complains of vertigo and intermittent headache





QUESTION 4

■ Your opinion

1. I agree with the principle of this 2-step approach: it was correct
2. I would have done both levels the first time = Fusion C5/6, arthroplasty C4/5
3. I would have done a 2-level fusion
4. I would have done a posterior approach
5. Other

Single answer only

QUESTION 4

■ Your opinion

1. I agree with the principle of this 2-step approach: it was correct
0%
2. I would have done both levels the first time = Fusion C5/6, arthroplasty C4/5
0%
3. I would have done a 2-level fusion
0%
4. I would have done a posterior approach
0%
5. Other
0%

Single answer only

Discussion

What should we do next ?