

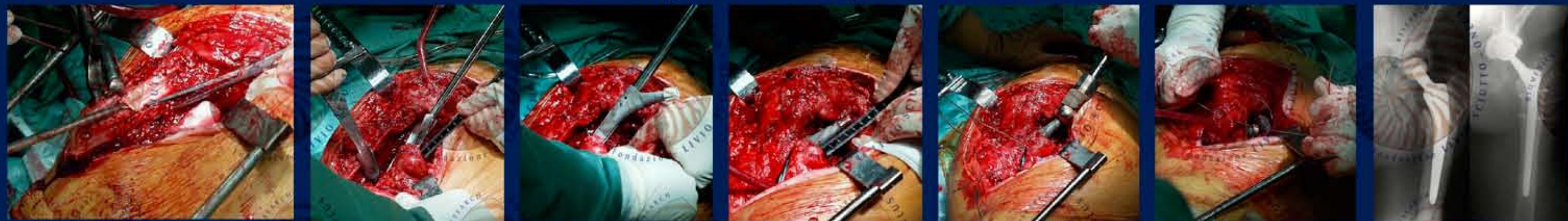
Femoral component revision in complex conditions in hips with important bone loss 8 to 12 years follow-up

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Revolution in surgical technique and it's evolution



Transfemoral Approach

Reaming

Endothelial-like growth factor
Transforming growth factor
Fibroblast growth factor
Platelet-derived growth factor
Connective tissue growth factor
Tumor necrosis factor- α
Osteopontin
Bone morphogenetic protein

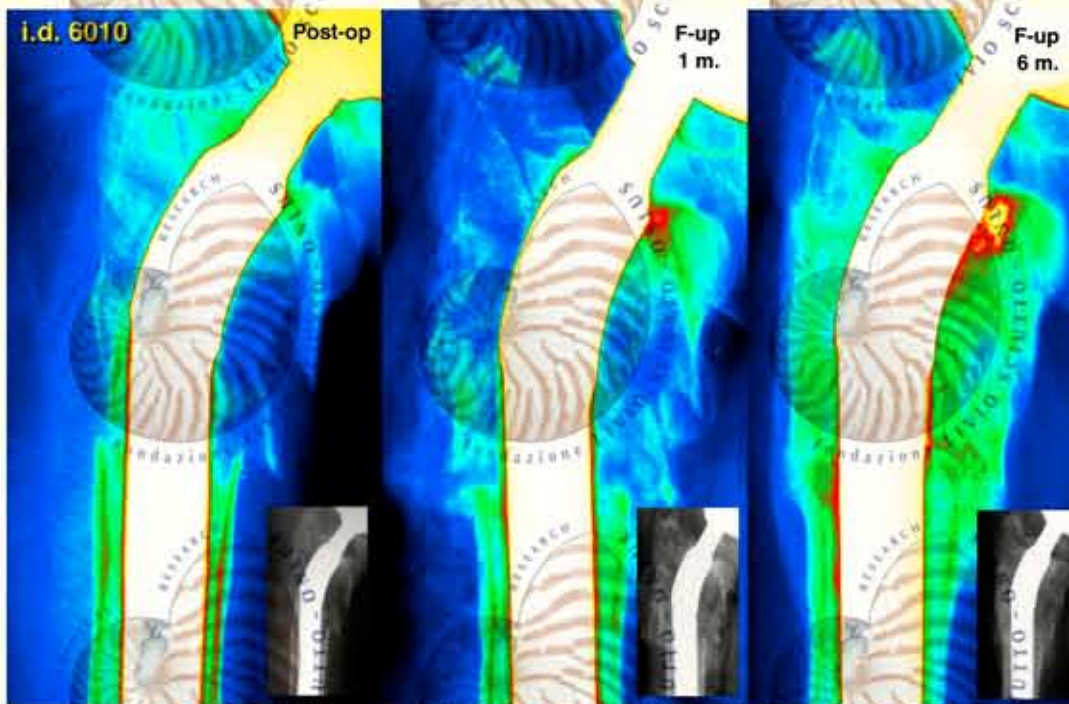
Fractured Bone

Remnant fragments



Material

Shape



Bone recovering



Improved offset and CCD angle

150 consecutive femoral revision arthroplasties dec.1988 - dec.1991

Stem: Wagner
 diam: 14-22 (length)
 (94) 62.6% of cases
 223 (15.9% of cases)
 203 (13.6% of cases)
 300 (20.0% of cases)

PREVIOUS STEM
 cemented 72.85%
 cementless 27.15%

PERIOPERATIVE COMPLICATIONS

- 8 cases dislocations (5.3%)
- 3 deep venous thromboses (2%)
- 2 sciatic nerve palsy (1.3%)
- 1 intraoperative femoral fracture (0.7%)

Bone loss and previous surgery

1 st REVISION	0.4-3 %
2 nd REVISIONS	31.7 %
3 rd REVISIONS	11.0 %
4 th REVISIONS	1.0%

RADIOGRAPHICAL ANALYSIS
 81 Cases (Survey Dec. 88 - Dec. 91)
 Average Follow Up 101 M.

I. B. D.
 Implant Bone Demarcation

LOW GRADE 1 zone	09 Cases
LOW GRADE 2 zones	14 Cases
LOW GRADE 3 zones	04 Cases
HIGH GRADE 4 zones	04 Cases
HIGH GRADE 5 zones	02 Cases
COMPLETE 7 zones	01 Case

Subsidence

2 CASES	> 5 mm
7 CASES	3-5 mm
72 CASE	0-3 mm

Introduction

T.H.A. revisions are constantly increasing; and it's known that bone defects - especially if severe like in revision cases - are the main problem to manage during the revision surgery. Since 1988, we have chosen to bypass the bone defects by using an "elastic" non-invasive tapered stem (SL Wagner); morsel bone graft is rarely necessary, we never use a massive one. According to our philosophy in revisioning, stability should be obtained by a diaphysary anchorage as proximal as possible.

Methods:

Our research concerns 150 cases of SL revision stems implanted from December '88 to December '91. The average age is 67 years old, complete clinical evaluation and survivorship analysis for the entire study cohort was performed from 8 to 12 years follow-up, radiographic analysis in 81 cases with 101 months avg. follow-up (min. 60 - max. 143).

Results and discussion

4 cases required rerevision; 20 patients deceased; 12 were lost to follow-up; 96 examined. Clinical evaluations show an average score of 78 (acc. to HHS); 82.3 percent of patients are pain free, while slight pain still persists in a 13.7 percent pain in a 3.9 percent.

The radiographic analysis has put into evidence only 1 case of mobilization, and suffering bone in 4 percent of cases; by contrast, 79.5 percent show astonishing endosteal bone formation.

post-up

I.d. 7072
 37 m.

I.d. 6806
 E.up 4m. E.up 112 m.

I.d. 7171
 91 m.

I.d. 5742
 105 m.

I.d. 3309
 143 m.

Conclusions

- Results are good for both clinical and radiographic aspects
- Few difficulties and complications in surgical techniques were related to:
 - learning curve
 - optimal CCD angle

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Revision total hip arthroplasty
 (Survey 1989-2003)

Our experience: 982 Wagner implanted out of 3587 revisions

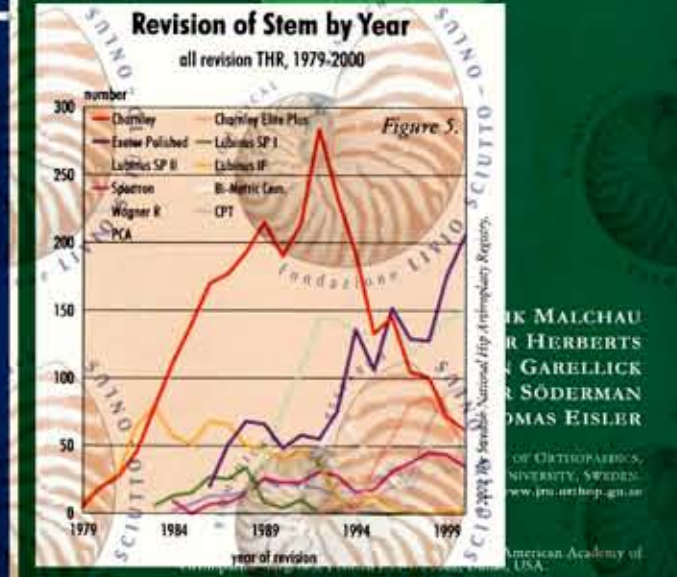


Prognosis of Total Hip Replacement

Update of Results and Risk-Ratio Analysis for Revision and Re-revision from the Swedish National Hip Arthroplasty Register 1979-2000.

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Use of stem components in revisions
 (Survey 1989-2003)



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