PJI TREATMENT WITH IMPLANT REPLACEMENT AND LOCAL CALCIUM PHOSPHATE + HA ANTIBIOTIC CARRIER: SHORT TERM RESULTS FROM A SINGLE CENTER

Sistema Socio Sanitario
Regione Lombardia
ASST Fatebenefratelli Sacco

Brioschi D, Moretti F, Larghi M, Manzotti A

Az. Ospedaliera – Polo universitario ASST Fatebenefratelli - Sacco, Milano, Italy
Orthopaedics and Traumatology Dept. (Dir. A.Manzotti)

EP341

INTRODUCTION

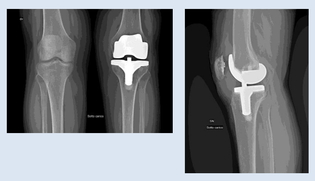
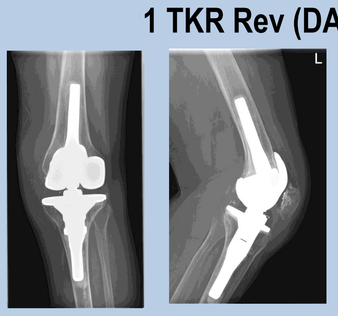
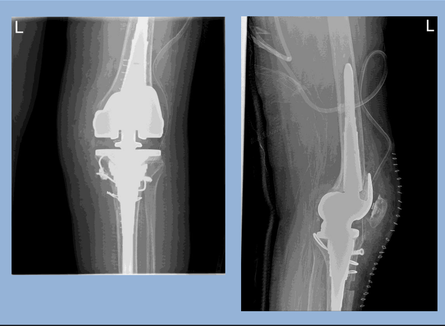
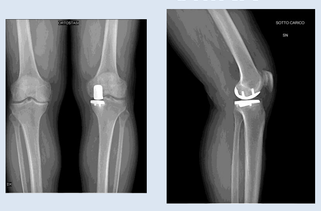
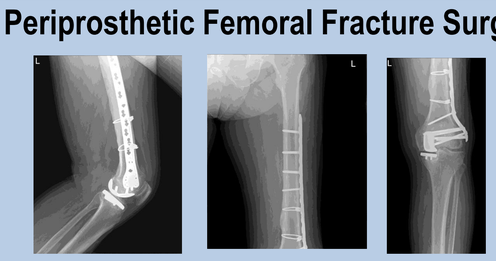
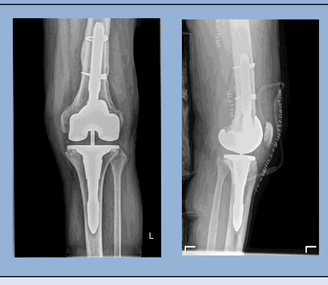
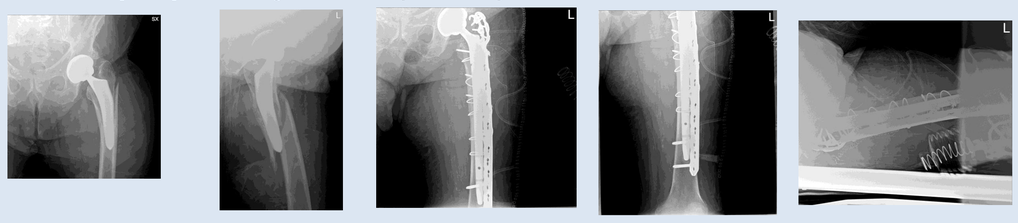
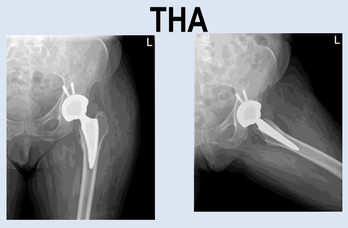
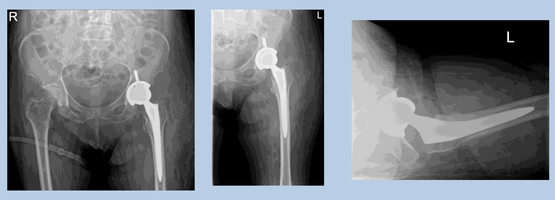
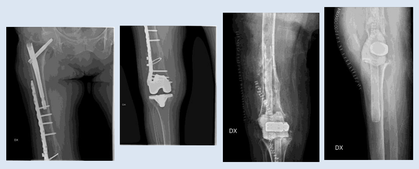
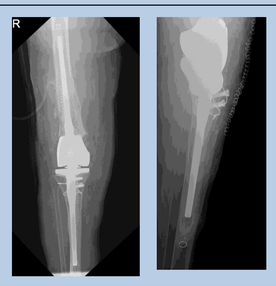
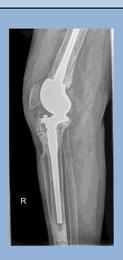
PJI treatment still represents a high challenge in orthopedic surgery. Many efforts are still ongoing to increase the chances of success in revision surgery, mainly o perform a revision surgery with local device to prevent further reinfection.
Beyond the common strategies of one and two-stage revision, we tried to apply the concepts of local device antibiotic carriers and bone growth induction materials even in a small case series of PJI reimplantation surgery.

MATERIALS AND METHODS

We present short term results of the use of a **Calcium Sulphate + Hydroxyapatite carrier added with antibiotic (Gentamicin)**, used in revision implants and ORIF plates **in PJI revision surgery**.

Patients treated were 5 (2 M 3 F), mean age 67.4 Surgery treatments were 2 THA revisions, 3 TKR revisions (1 associated with periprosthetic fracture ORIF).

Clinical and local follow up was performed at 12 months.

Patient	Sex	Age	1° Surg.	2° Surg	3° Surg	Follow Up at 12 M
AG	F	66	**Extensor Suture in TKR** 	**1 TKR Rev (DAC)** 	**2 TKR Rev (CER-G)** 	RX: OK Local: OK OKS: 31
GS	M	68	**UniKR** 	**Periprosthetic Femoral Fracture Surgery** 	**RMS + RPTG (CER-G)** 	RX: OK Local: OK OKS:39
MV	M	82	**TKR Rev + periprost. synthesis (CER-G)** 			RX: OK Local: OK HHS: 83.5
BM	F	62	**THA** 	**One stage THA Rev (CER-G)** 		RX: OK Local: OK HHS: 94
BRA	F	64	**TKR & Nail removal + CUMARS** 	**Two stage TKR Rev (CER-G)** 	**RMS TTA Screws (CER-G)** 	RX: OK Local: OK OKS:34

RESULTS

At 12 months follow up we registered no failure among all the implants with no signs of early loosening at X rays. No local signs of sinus or infection.

1 patient (BRA) was submitted to local revision and DAIR with removal of only 1 TTA screw for intolerance (intraoperative cultures negative).
Patients were all satisfied with full regain of ADL.
Follow up is still ongoing.

DISCUSSION

The treatment of PJI is still difficult due to PJI recurrency, especially in complex surgery or repeatedly operated patients.
This remains one of the major challenges in joint arthroplasty and the use of a local device improving both asepsis and bone ingrowth could be a valid aid and a promising technology for these patients.
Longer and larger follow-up are required regarding advantages or limits even in terms of cost.