

LONG-TERM RESULTS FROM THE USE OF A PRE-FABRICATED ARTICULATING ANTIBIOTIC-LOADED CEMENT SPACER IN TWO-STAGE REVISIONS FOR INFECTED TOTAL HIP REPLACEMENTS.

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INTRODUCTION

- Hip arthroplasty is amongst one of the most common procedures carried out in the NHS.
- Approximately 1 in 100 patients undergoing hip or knee replacement surgery will develop a prosthetic joint infection.
- This carries a considerable burden of morbidity and mortality on the NHS.
- Pre-fabricated articulating antibiotic-loaded cement spacers can be used in the treatment of infected total hip replacements, but there remains little long-term data to support their use.
- We carried out a retrospective study to analyse long term results of the use of the 'Spacer G' antibiotic loaded implant in two-stage revision surgery at our unit.

METHODS

- 29 patients with infected hips (28 primary THRs, 1 revision THR) underwent a two-stage revision for prosthetic joint infection between June 2011 and October 2020.
- All patients had the Spacer G articulating pre-fabricated cement spacer (loaded with gentamicin and vancomycin) utilised in the first of a two-stage revision for infection.
- We analysed the patient data, the infection status, and our primary endpoint was to assess how many patients developed recurrence in our follow up data.

Xray prior to 1st stage



1st stage revision with Spacer G implant



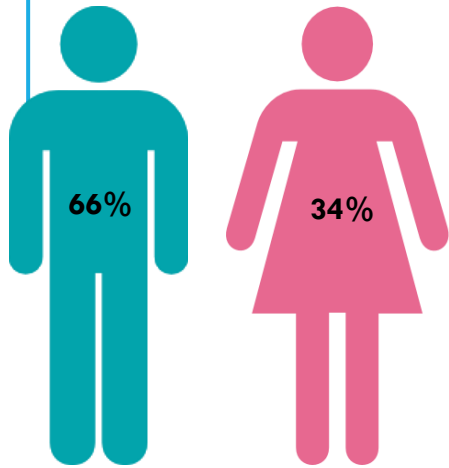
2nd stage revision



2 year follow up.



RESULTS

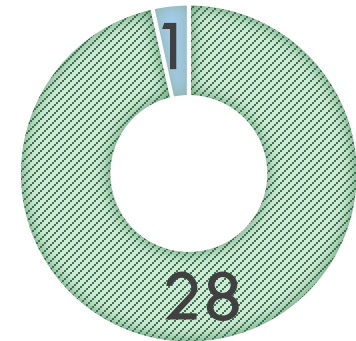


Median age at first stage surgery was 71.

Mean time between the 1st and 2nd stage was 24 weeks

With a range of 4-82 weeks

INFECTED PROSTHESIS
■ Primary THR ■ Revision THR



Follow Up period Range (months)



29 Patients identified

28 patients had completion to 2nd stage. 1 patient died prior to 2nd stage.

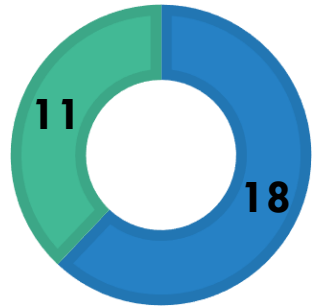
21 patients alive today

8 patients passed away a mean of 60.3 months after the first stage.

MICROBIOLOGY RESULTS

INTRAOPERATIVE CULTURE 1ST STAGE

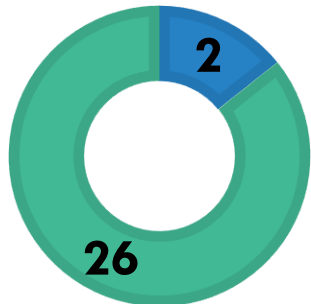
■ Positive ■ No Growth



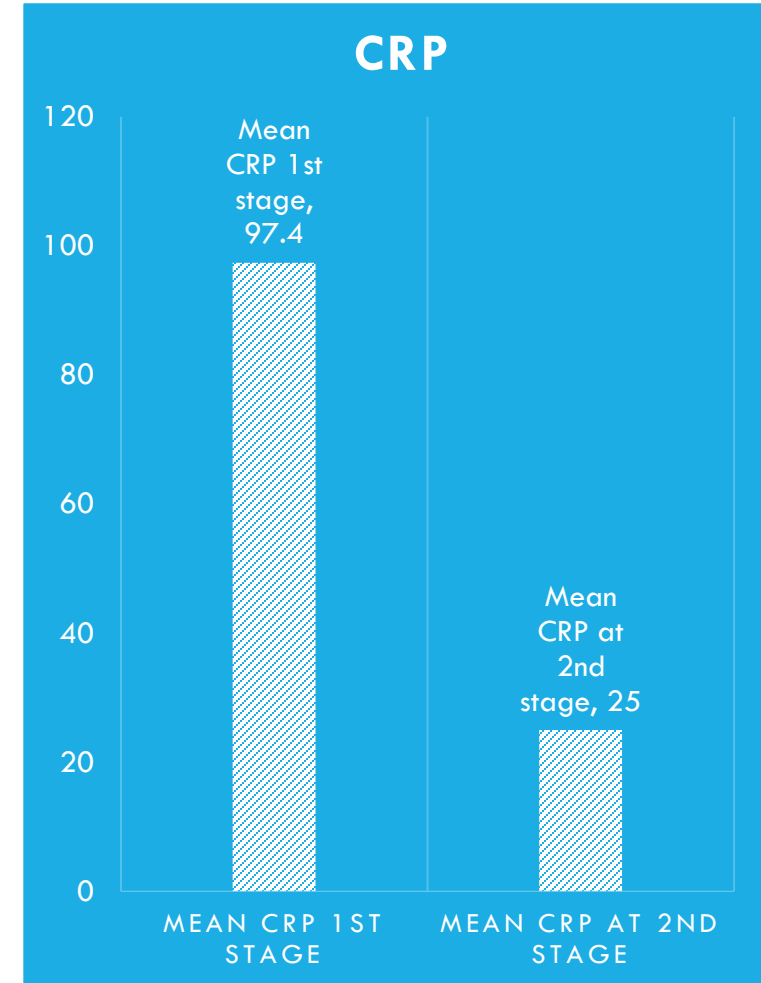
All Patients underwent a prolonged course of antibiotics following the 1st stage.

INTRAOPERATIVE CULTURE 2ND STAGE

■ Positive ■ No Growth



22 Patients were given post operative antibiotics following the 2nd stage.





Patient Outcome

- There was only 1 Complication- Patient sustained a dislocation of the Spacer G implant and required an open reduction.
- For the Duration of follow up. 27 from the 28 patients who completed the 2-stage revision procedure remained infection free.

Conclusion

- Pre- Fabricated antibiotic-loaded articulating cement spacers can be useful when managing infected total hip replacements.
- Our long term follow up data demonstrates that there is a low complication rate and that the procedure can facilitate long-term infection control.
- Thankyou.