The Girdlestone Procedure: Real Life Ortho

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November 18th, 2016
Disclosures

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The Girdlestone Procedure: When All Else Fails

- History
- Current indications
- Outcomes
- Future
“If Thy Hip Offends You...”
“Know when to hold ‘em…”

- Know when to walk away.
- Know when to run.
Evolving Practice

- 10 years of Private Practice
- 4 Resection Arthroplasties
- 3 in the Last 18 months
- Bad Run or Lowered Threshold?
- Current Indications and Outcomes
History

- Dates back to Early 19\textsuperscript{th} Century
- Popularized by G. Girdlestone
- Treatment of TB and Septic Hip infections.
History

- Gathorne Girdlestone
- Born in Oxford in 1881
- Educated at New College, Oxford
- Trained at St. Thomas’ Hospital in London
- Joined Sir Robert Jones in Baschurch.
History

“Four or five years after I qualified and knowing almost nothing about orthopaedics, which at that time was little understood in the medical schools of London, I came across Robert Jones at Baschurch. “

“Children suffering from tuberculosis of the spine and hips whom I had seen in the wards of my teaching hospital pale and suppurating inherited from dressers until they died of Lardaceous disease, I found in Shropshire in the best of health and spirits.”

CORR Number 173 March 1983
HISTORICAL NOTES

Robert Jones, Gathorne Girdlestone and excision arthroplasty of the hip
Fig. 3
Illustration of the hip in Figure 1 post-operatively.

- HISTORICAL NOTES

Robert Jones, Gathorne Girdlestone and excision arthroplasty of the hip
Modern Resection Arthroplasty

- 1972 – 1992
- 102 Resection arthroplasties
- 42 further surgeries on 26 patients
- 86% infection free
- 100% required a walking Aid

The Girdlestone pseudarthrosis in the treatment of infected hip replacements

J. Castellanos, X. Flores, M. Llusà, C. Chiriboga, A. Navarro
Department of Orthopaedic Surgery and Traumatology and of the Rehabilitation and Traumatology University Hospital, Vall d’Hebron, Barcelona, Spain
Accepted: 20 June 1997
Outcomes

- 14 Hips removed
- 2 re-operations for sinus tracts
- 1 was a re-implant 4 years post Girdlestone which subsequently became infected

Girdlestone Arthroplasty for Infected Total Hip Arthroplasty

Edward S. Bittar, M.D., Ph.D., and William Petty, M.D.
Functional Status:

- 12 Patients were ambulatory
  - 5 required 2 crutches
  - 5 could use 1 crutch
  - 2 required ischial weight bearing braces
- 4 went on to have re-implantation
- 13/14 were dissatisfied
Outcomes

- Long Term Follow up – Mean 44.5 months
- 25 died before final follow up
- 4 had reimplantations
- 14 qualified for review
Outcomes

- All needed walking aides
- 12/14 had pain control
- 10/14 were satisfied overall
Outcomes

“Repeated surgical procedures, prolonged morbidity, inter-current illnesses and repeated invasive investigations can lead to depression and dissatisfaction in patients with infected prostheses.”

International Orthopaedics (SICOT) (2005) 29: 92–95
DOI 10.1007/s00264-004-0633-3

ORIGINAL PAPER

H. Sharma · J. De Leeuw · D. I. Rowley

Girdlestone resection arthroplasty following failed surgical procedures
Outcomes

- “Walking Aid use should not be considered as a negative assessment”
- Limb Shortening is inevitable
- Patients should be counseled accordingly
- Overall Contentment was 10/14
Our Recent Experience

- 4 Cases
- All four for infection
- 3 of 4 with BMI > 45
- Mean of 6.25 procedures between primary and Girdlestone
Case 1

- 67 yo Female
- Left THR
- Rejuvenate Modular stem
- Revision of femoral component
- Acetabular component stable and well fixed
- Deficiency of abductors due to soft tissue erosion.
- Conversion to constrained liner
- Subsequent intra-prosthetic dislocation
- Cup Revision
- Changed manufacturer
- Hoping for better locking mechanism and improving anteversion
1 year post hip resection
- Denies pain
- Limited ambulation
- One subsequent procedure for evacuation of seroma
Case 2

- 44 year old male
- History of SCFE
- HW removal
- Comes in for Right THR

“I’ve had 6 surgeries on the left, but that other guy wasn’t’ as good as you, Dr. Jarrett”
Case 2
Case 2
Outcomes

- All four for Persistent refractory infection
- 3 of 4 ambulate with a walker
  - “Happy”
- 1 of 4 wheelchair bound
  - Waiting for re-implantation of right hip
Conclusion

- Primary Goal is Pain relief and infection control
- The decision between revision and resection is a tough one
  - There will always be patients who need it
  - Re-implantation can be complicated
- 2-3 Inches of shortening
- Invariable need for walking aid
Conclusion

Resection Arthroplasty provides fair control of infection.
Patient’s will be significantly less ambulatory.
Pain control is improved.
Persistent wound issues can be present.
Modification of Patient’s expectations.
Thank You