Decision Making for Older Femoral Neck Fractures - Who Gets a Hemi and Who Gets a Total Hip?

Do I Use Cement or Press Fit?

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 Notes

Medicare data: For persons > age 65, the majority of patients with FNF are treated with some form of prosthetic replacement.

###### What is the role of THA?

Should stems be cemented or not?

Should I use a large head or constrained liner if I do THA?

Rationale for Arthroplasty

Rapid, safe mobilization of patient

 Complications frequent after ORIF

 AVN: 30%

 Nonunion: 20%

Options for Prosthetic Replacement

Unipolar hemiarthroplasty

 Bipolar hemiarthroplasty

 Total hip arthroplasty

 Cemented

 Noncemented

How to Choose?

 Literature confusing.

Few randomized, prospective studies comparing modern devices implanted with current techniques.

 Unipolar devices:

 Pain, acetabular erosion, dislocation.

 Stem design not modern (Moore and Thompson).

 Loosening, subsidence frequent if press-fit.

 Acetabular erosion common when cemented.

 Bipolar devices:

 Decreased stress on articular cartilage

 Easily revised to THA.

 Pain still common.

 Bipolar heads are a source of wear debris.

 THA: More expensive??? Less pain. More dislocation??

 Conclusion: Unipolar

Pain common, may occur with or without acetabular erosion.

 Low rate of instability, easier to reduce.

 Best in low demand patient.

 Conclusion: Bipolar

 Less protrusio, pain mild but still frequent.

 Best results with cemented.

 May be difficult to reduce if unstable.

 Conclusion: THA

Best pain relief.

Higher rate of dislocation, but few are recurrent and it doesn’t seem to impact reoperation rates. Less common with current surgical techniques and larger femoral heads

Indicated for most community ambulators

Stems

 Use a modern design.

 Decide on cement or not based on patient’s bone and function.

 I now rarely cement

Heads

 There seems to be little reason to use a bipolar

THA

 Excellent, durable operation in an active patient.

 Don’t be afraid of dislocations, but use:

 Anterolateral approach or posterior approach with capsular repair

 Larger heads (32, 36 mm) ok

 Don’t need constrained liners

Summary

There continues to be much controversy about many aspects of the care of the elderly patient that suffers a femoral neck fracture. Large multi-center trials are necessary before many of these controversies can be legitimately settled.