

Application of Clinical Practice Guidelines: Differences in Management of Femoral Neck Fractures by Trauma or Arthroplasty Training

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Purpose: The purpose of this study was to survey Trauma (TS) & Arthroplasty Surgeons (AS) to investigate associations of specialty and treatment for displaced elderly femoral neck fractures (FN Fx) & to compare them to clinical practice guidelines (CPG).

Methods: 556 surgeons completed an online survey through either the OTA or AAHKS websites. Respondents identified their specialty as TS (9%), Arthroplasty (70%), other (5.5%), none (14.5%), or both(1%). The survey consisted of 2 sections: 1) surgeon demographic and practice information; & 2) two FN Fx cases with affiliated questions regarding treatment based on CPG familiarity, validity and applicability.

Results: TS were less likely than AS to recommend total hip arthroplasty (THA) and spinal anesthesia in both cases(Table 1). There were no differences between the groups in cement use, uni- or bipolar hemiarthroplasty (HHA) use, or approach. Surgeons under age 40 were more likely to use cement (p<.05), regardless of specialty. Familiarity, training, and CPGs were the most important factors driving decision making while cost,implant availability,& case duration were less important.

Conclusion: AS are more likely to recommend THA over HHA and request spinal rather than general anesthesia for the treatment for displaced FN Fx in the elderly. Overall, most surgeons are familiar with CPGs and believe they are supported by the literature, but few have changed their practice as a result.

Table 1. Arthroplasty and Anesthesia Preferences for Trauma and Arthroplasty Surgeons

	Case 1	HHA	THA		p	Case 2	HHA	THA		p
Trauma		6 (12%)	42 (84%)				45 (90%)	5 (10%)		
Arthroplasty		14 (4%)	370 (96%)		0.01		277 (71%)	112 (29%)		0.02
	Case 1	General	Spinal/reg.	Defer	p	Case 2	General	Spinal/re g.	Defer	p
Trauma		11 (22%)	20 (40%)	19 (38%)			6 (12%)	19 (38%)	25 (50%)	
Arthroplasty		50 (13%)	272 (70%)	68 (17%)	<0.01		56 (14%)	241 (62%)	93 (24%)	<0.01

The FDA has stated that it is the responsibility of the physician to determine the FDA clearance status of each drug or medical device he or she wishes to use in clinical practice.