&Idquo;Traumaplasty" in Clinical Practice: An analysis of the number of total hip arthroplasty cases performed by newly-board certified orthopaedic trauma surgeons over the past 20 years

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INTRODUCTION: Over the last 20 years, the rate of total hip arthroplasty (THA) for displaced femoral neck fractures has increased; meanwhile, fellowship-trained arthroplasty surgeons have increasingly transitioned to outpatient and specialty-setting based practices. As such, orthopaedic trauma surgeons are required to perform THA more often. Specific training could improve care and access for patients who may benefit from a THA. The purpose of this study was to identify the trends in practice patterns of early-career orthopaedic trauma surgeons in regard to THA procedures.

METHODS: Data was collected from the American Board of Orthopaedic Surgery (ABOS) Part II Oral Examination Case List database from candidates who indicated a trauma subspecialty practice between 2003 and 2023. Cases of interest were identified by CPT Codes for THA (primary THA – 27130; complex THA - 27132, 27134, 27137, 27138). Fellowship training type and total case load data was collected. Surgeons were deemed to have a "high" caseload if in the top 50% of surgeons that year.

RESULTS:

Of 15,164 Candidates, 940 taking the ABOS Part II Oral Examination between 2003 and 2023 indicated a trauma subspecialty practice. The percentage of candidates pursuing a trauma subspecialty practice significantly increased during this time, from 2% to 8% (p < 0.0001). The number of early-career trauma surgeons performing THA as part of their practice significantly increased from 7 to 30, (p < 0.001). Surgeons with higher caseloads and those who had fellowship-training that included arthroplasty were more likely to pursue a "traumaplasty" practice.

During this collection period, a total of 2,597 THA were performed by early-career trauma surgeons, including 1,944 primary THA and 653 complex THA cases. The average number of THA cases performed by early-career trauma surgeons reporting at least 1 THA during their 6-month collection period and the proportion of their practice dedicated to THA has risen overtime (p < 0.0001 and p = 0.007, respectively), from 1.7 cases per surgeon and 1% of practice in 2003 to 6 and 4% in 2023. There has been a two-fold increase in the proportion of early-career trauma surgeons practice dedicated to primary THA and a four-fold increase in the proportion dedicated to complex THA.

DISCUSSION AND CONCLUSION: The number of total hip arthroplasty (THA) cases performed by early-career trauma surgeons has steadily risen over the last two decades, including both primary and complex cases. This change in practice towards "traumaplasty" may facilitate the care of displaced femoral neck fracture patients who would benefit from a THA. Trauma fellowships should consider incorporating arthroplasty training within their curriculum to address the shifting practice of surgeons entering the specialty and the changing operative needs of the active aging patient population.

