Surgical Trends in Arthroscopic Hip Surgery using a Large National Database

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Background

• Hip arthroscopy has seen dramatic growth over the past several years.\textsuperscript{1,2,3} As technology improves, indications continue to evolve.

• **Purpose:** Assess the practice trends in hip arthroscopy over a more recent time period, without concerns for Hawthorne or Observer effect as can be seen during a boards collection window, and in a larger volume of patients with a more comprehensive database than previous published data.

• **Hypothesis:** number of hip arthroscopies done each year is increasing and that labral repairs, femoroplasty and acetabuloplasty are increasing compared to labral debridements alone.
Methods

The MarketScan Commercial Claims and Encounters Database was searched using ICD-9 and CPT codes to identify patients who underwent any arthroscopic hip procedure from 2008-2013 including soft tissue procedures such as labral debridement or labral repair as well as osseous procedures such as femoroplasty or acetabuloplasty.

The MarketScan Commercial Claims and Encounters Database is a medical and drug insurance claims database which contains inpatient and outpatient records and services. It consists of data from over 100 insurance companies and large employers and contained information for over 39 million individual patients for each year included in our study.

Patients identified were characterized by gender, age group and year of the initial procedure. Data for procedures was also divided between index procedures and revision procedures. Regression analysis was used to evaluate differences in surgical trends between individual patient groups delineated by age and gender. The Cochran-Armitage trend test was used to identify significant differences in surgical trends seen yearly.
Results

- 27,997 patients, 62,782 procedures
- Incidence increased each year of study
Results

- Females more likely to undergo any procedure ($p < .0001$)
Results

- Labral debridement most common procedure across entire study period for all age groups
Results

• 2,754 patients (10%) underwent at least one revision procedure
• No significant difference by index
• No gender more likely to undergo revision arthroscopy
Conclusions

• Arthroscopic hip procedures continue to increase in incidence
• Females are more likely to undergo any procedure (p < .0001)
• Femoroplasty has become the most common procedure performed
• Patients age 40-49 underwent the most arthroscopic hip procedures.
• Labral/chondral debridement most common revision procedure
• No index procedure is statistically more likely to result in a revision
• Gender not a factor for revision arthroscopy but males slightly more likely to undergo THA soon after arthroscopy (6.3% versus 5.5%, p = .006)
• 6% of patients undergo hip arthroplasty within 5 years of having hip arthroscopy
• Patients undergoing loose body removal most likely to undergo THA during study
References

