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Introduction: Rates of hip arthroscopy have been on an exponential rise over the last decade. The purpose of this study was to evaluate the rate of subsequent THA following hip arthroscopy and determine how soon after hip arthroscopy THA was performed.

Methods: The Humana Inc. administrative claims dataset was reviewed from 2007-2014 for all patients undergoing hip arthroscopy. This represents 16 million covered lives. Patients who underwent hip arthroscopy were identified using CPT codes and laterality modifiers for left and right hip arthroscopy. Patients were then tracked overtime for the occurrence of an ipsilateral THA. Rates of subsequent THA were then determined and time to subsequent THA was determined within 6 month intervals. Records without laterality designation were excluded.

Results: There were 1,305 patients that underwent hip arthroscopy in this dataset. Top three largest age groups for hip arthroscopy patients were: 40-44 (11.4%), 35-39 (10.4%) and 45-59 years (9.8%). Tracking of patients revealed 67 (5.1%) patients that had a hip arthroscopy went on to a subsequent ipsilateral THA within the time constraints of the dataset. Of the subsequent THA, 37.3% occurred within 6 months of hip arthroscopy and 85.1% had occurred within 18 months. 100% of subsequent THA occurred within 48 months of initial hip arthroscopy.

Conclusions: 5.1% hip arthroscopies (67 of 1,305 patients) went on to require subsequent THA during the time period included in this dataset. The time interval to conversion to THA was 37.3% at 6 months, 59.7% at 12 months, 85.1% at 18 months and 91% at 24 months. This data suggests that when hip arthroscopy fails, it fails relatively soon after the procedure. These results provide a needed understanding of rates and timing of THA after hip arthroscopy and serve as an important baseline as rates of hip arthroscopy continue to significantly increase.