Risk of total hip replacement after hip arthroscopy increases with age

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| Challenge | **The purpose of this study was to evaluate risk factors for conversion of hip arthroscopy to total hip arthroplasty within 2 years in a closed patient cohort.** |
| Existing Evidence | Few studies have examined the risk factors for the risk of total hip arthroplasty among patients treated initially with hip arthroscopy; the few prior studies relevant to the effectiveness of hip arthroscopy have examined post-surgical symptoms but not evidence of procedure failure, as indicated by the need for hip replacement soon after a hip arthroscopic procedure. |
| Target Population | Adult patients undergoing hip arthroscopy (with or without labral tear) |
| Intervention or Exposure | Hip arthroscopy  |
| **Outcomes/Key Findings** | **The risk of conversion to THA within 2 years after hip arthroscopy increased substantially with patient age at the time of the procedure. BMI, race, sex, and prior arthroscopy were not important independent predictors of conversion beyond the information contained in patient age.**The mean follow-up time was 4.9 years (median 4.6, range 0.6 to 11.6). The mean age was 37.2 years (range 10 to 88), and 57% were female. During the followup period, 82 patients underwent a THA within 2 years of their arthroscopies (5.3%, 95% confidence interval 4.3% to 6.5%) after a median time of 9 months (interquartile range 5.9 to 14.4) after the initial arthroscopy. Increasing age was highly predictive of early THA conversion (area under the ROC curve = 0.78, P < .001). |
| **Resulting Action/Change** | **The results of this study provide important information for orthopedists in counseling older patients about the likelihood of surgical success with hip arthroscopy for osteoarthritis.** |
| Additional Recommendations | Dissemination of the results to orthopedic surgeons and consideration of feedback regarding if/how this might change practice to inform future practice/research. |
| Implementation Tools  | None |
| Implementation Measurement | No current plans; it is possible to examine the rates of hip arthroscopy among older patients in the future to see if the information provided from this work has altered practice. |
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