Age-Related Trends in Hip Arthroscopy

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CLINICAL & TRANSLATIONAL MEDICINE

• Hip arthroscopy is an increasingly popular minimally-invasive procedure.
• Indications have expanded rapidly in recent years.
• Certain indications can be controversial - e.g. arthroscopy in older patients with arthritis.

AIM

Report age-related utilization of hip arthroscopy and rate of subsequent conversion to total hip arthroplasty (THA) in a large cross-sectional population.

METHODS

• Retrospective longitudinal analysis
• Data source: United Health Care claims
• 20,484,172 patients analyzed
• Years 2007-2011
• CPT coding used to identify:
  • Hip Arthroscopy (29860-29683, 29914-29916, 29999)
  • Hip Arthroplasty (27130, 27132)
• Stratified by age groups
• Patients tracked longitudinally had minimum two year follow-up
• Chi-squared and Kaplan-Meier log-rank test for statistical analysis

BACKGROUND

• Steadily increasing utilization of hip arthroscopy likely attributable to:
  • Technical advances
  • Broadening indications
  • Exposure in training
• Significant increase across all age groups
• Satisfactory outcomes in young patients
• Conflicting evidence in older patients
• Overall 2-year THA conversion rate: 8.7% (Figure 4)
• Greater risk in patients >50 (17%)
• All patients who converted to THA had osteoarthritis as diagnosis.

RESULTS

• 8,227 hip arthroscopies identified
  • 250% increase over study duration (Figure 1)
• Age groups with highest utilization (Figure 2):
  • Age 40-49 (28%)
  • Age 30-39 (22%)
  • Age 50-59 (19%)
• Greatest growth over study duration (Figure 3):
  • Age <30: 335% increase
  • Age 30-39: 256% increase
  • Age 40-49: 234% increase
• Overall conversion rate to THA: 8.7% (Figure 4)
  • Age <30: <1%
  • Age 50-59: 17.1%
  • Age >60: 16.5%

CONCLUSIONS

• Steadily increasing utilization of hip arthroscopy likely attributable to:
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  • Broadening indications
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