Hip arthroscopy after total hip replacement (THR)

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Persistent pain after THR can be very frustrating for patients and surgeons. It often presents a diagnostic and therapeutic challenge. Sometimes standard procedures including radiographs, blood studies, joint aspiration or bone scans may lead to treatable diagnoses such as loosening or infection (1).

There are some reports of the use of hip arthroscopy in resolving unexplained pain after THR. In most cases the arthroscopy has been performed for diagnostic reasons. The findings have included loose acetabular components, corrosion of the head-neck junction (metal-on-metal), soft tissue or scar impingement of the head-cup interface, synovitis, metallosis, capsular scarring and broken pieces of poly-element (2–4). Arthroscopic assessment of polyethylene wear has also been reported (5).

There are also some therapeutic indications where hip arthroscopy might be considered after THR. They include joint sepsis (late – acute infection) (6), intra-articular metal fragments (pieces of wire, loose acetabular screws) or bone cement (2). Femoroacetabular impingement and on some occasions psoas tendonitis can be treated arthroscopically after resurfacing arthroplasty (1).

Reported complications are rare. There is only one reported dislocation after arthroscopy (7). Technically the surgeon must follow the normal hip arthroscopy guidelines. Even more attention should be paid to the amount and duration of the traction. The articulating surfaces should not be scratched during the operation.

Resources for performing hip arthroscopies are quite limited in Finland. We have to be very careful in order to select the right patients for hip arthroscopy after THR. And of course we need more and better studies to define the role of arthroscopy in evaluating and treating the painful hip arthroplasty.

References

- 1. Nikolaou V, Bergeron SG, Huk OL, Zukor DJ, Antoniou J: Evaluation of persistent pain after hip resurfacing. Bull NYU Hosp Jt Dis. 2009;67(2):168-172.
- 2.McCarthy JC, Jibodh SR, Lee JA: The role of arhroscopy in evaluation of painful hip arthroplasty. Clin Orthop Relat Res. 2009;467(1):174-180.
- 3.Khanduja V, Villar RN: The role of arthroscopy in resurfacing arthroplasty of the hip. Arthroscopy. 2008;24(1):122.e1-3.
- 4. Nordt W, Giangarra CE, Levy M, Habermann ET: Arthroscopic removal of entrapped debris following dislocation of a total hip arthroplasty. Arthroscopy. 1987;3(3):196-8.
- 5. Fontana A, Zecca M, Salla C: Arthroscopic assessment of total hip replacement and polyethylene wear: a case report. Knee Surg Sports Traumatol Arthrosc. 2000;8(4):244-245.
- 6. Hyman JL, Salvati EA, Laurencin CT, Rogers DE, Maynard M, Brause BD: The arthroscopic drainage, irrigation, and debridement of late, acute total hip arthroplasty infections: Average 6-year follow-up. J Arthroplasty. 1999;14(8):903-910.
- 7. Jones CW, Biant LC, Field RE: Dislocation of a total hip arthroplasty following hip arthroscopy. Hip Int. 2009;19(4):396-398.