

Hip

Orthopedist's goal in treating unexplained post-THA hip pain is to clarify and resolve

Correct diagnoses may reveal treatable osteolysis or psoas tendon, infection, cup orientation issues.

By Susan M. Rapp
ORTHOPEDECS TODAY 2010; 30:49

ORLANDO, Fla. — When patients develop [unexplained hip pain](#) following total hip arthroplasty — particularly in the first postoperative year — orthopedic surgeons should explore failed fixation, [infection](#), impingement, soft tissue irritation or [metal hypersensitivity](#) as its cause.

Speaking here at the [26th Current Concepts in Joint Replacement Winter 2009 Meeting](#), John M. Cuckler, MD, said, “Look at the history. Rule out infection. Seek objective evidence and do not operate without good cause.”

He made a strong case for counseling patients with hip pain about their situation explaining how important it is to reassure them that with time and their cooperation the problem will likely be resolved.

Making the diagnosis

Cuckler, of Birmingham, Ala., discussed tools and tests available to orthopedic surgeons for diagnosing unexplained hip pain after total hip arthroplasty (THA). He recommended first determining whether or not the pain is the same as it was before surgery in terms of its location and intensity.

If it is not, “then maybe the hip was not the source of the problem,” Cuckler said.

Spinal stenosis and lumbar degenerative disc disease are types of pain that may present as hip pain, but are not due to hip problems, he noted.

Labs, imaging

Once the hip is identified as the source of a patient's pain, Cuckler suggested considering one or more of these diagnostics where appropriate:

- perform serologic tests to determine sedimentation rate and C-reactive protein (CRP) levels;
- for high sedimentation rates and elevated CRP results, perform a radiographically controlled joint aspiration; and
- compare serial hip radiographs from before and after the onset of pain, looking for such changes as subsidence, demarcation, wear or osteolysis.

If these studies do not reveal the source of pain, consider following the patient with serial bone scans every 6 to 12 months and radiographs every 6 months, to see if this helps detect any changes, Cuckler said.

Metal issues

Sensitivity and hypersensitivity constitute two conditions that must be carefully considered as causes of hip pain following metal-on-metal THA.

According to Cuckler, Hans G. Willert, MD, and colleagues encountered patients with pain accompanied by effusion or osteolysis soon after surgery with metal-on-metal hip implants.

“He indicated that revision to a non-metal-on-metal implant — that is, metal-on-polyethylene — is indicated and I agree with that,” Cuckler said.

Problem “cytes”

Orthopedists should be suspicious of patients whose aspiration yields an excessive number of monocytes, because this may indicate sensitization rather than infection, Cuckler said.



John M. Cuckler, MD, noted that many causes of hip pain are not due to problems in the hip, such as spinal stenosis and lumbar degeneration.

Image: Rapp SM, *Orthopedics Today*



ORTHOPEDECS
today
is the official
newspaper of EFORT

Breaking Influenza
A (H1N1) Updates

CHOOSE A TOPIC:

Arthritis
Arthroscopy
Biologics
Business of Orthopedics
Foot & Ankle
Hand/Upper Extremity
Hip
Imaging
Infection
Knee
Oncology
Osteoporosis
Pediatrics
Rehabilitation
Shoulder/Elbow
Spine
Sports Medicine
Trauma

Best Practices:
Surgical Techniques
Round Tables
Commentary

Questions
with Dr. Jackson

Find a Meeting

ORTHOPEDECS
today
HAWAII
2011

RSS

Mobile

Submit a manuscript
Subscriber Services
Order article reprints
Classified Marketplace
Bookstore

SIGN UP FOR THE

ORTHO SuperSite
News Wire
&
ORTHOPEDECS
e-contents

ORTHOPEDECS

MMMA
Awards
2008

"Best Healthcare
Business Publication"

Performing a cell block helps determine whether the predominance of cell types is mononuclear, which is associated with hypersensitivity, he said.

"If they are predominantly lymphocytes, you should start thinking about hypersensitivity. Of course, the capsular histology at the time of revision is also confirmatory evidence."



Even well-fixed femoral stems can be associated with thigh pain as this patient experienced after total hip arthroplasty (THA). Eccentric reaming of the lateral femoral cortex may also produce thigh pain.

Chronic psoas tendon impingement occurred in this primary THA case. The AP radiograph shows a retroverted acetabulum that produced groin pain with active hip flexion.

The patient's groin pain resolved completely with a revision that yielded an anteverted socket.

Images: Cuckler JM

Pain with activity

Early or late post-THA pain with activity signal thigh pain or psoas tendon impingement can be problematic. Session moderator Joshua J. Jacobs, MD, of Chicago, and audience members asked several questions about resolving this kind of pain.

Jacobs inquired whether thigh pain is less prevalent now than when cementless THA was first available.

"I think thigh pain is less frequent with the titanium taper-type designs than it is with the cylindrical cobalt chrome fully coated designs, but thigh pain is still with us both with cementless and cemented stems," Cuckler said.

He attributed the reduced incidence of thigh pain today to the fewer overall number of loose femoral stems with cementless THA. When he encounters this problem, Cuckler treats patients with no loosening and no improvement for at least 1 year with an onlay allograft.

Injections

"Many cases tend to resolve with time, counseling and explanation to the patient," Cuckler said.

For psoas tendon impingement and tendonitis, he discussed the merits of injecting lidocaine combined with a long-acting steroid into the psoas tendon under fluoroscopic guidance, which can be effective for patients with groin pain associated with active hip flexion. However, patients can run the risk of having a short-term relief due to placebo effect from this.

When a malpositioned acetabular cup is the cause of impingement, Cuckler said, for him, that is usually an indication for acetabular component revision surgery rather than psoas tendon release.

For more information:

- John M. Cuckler, MD, can be reached at Brookwood Medical Plaza, 513 Brookwood Blvd., Suite 375, Homewood, AL 35209; 205-802-4577; e-mail: jcuckler@charter.net. He is a consultant to Biomet Orthopedics and Smith & Nephew Orthopaedics and belongs to the Biomet Orthopedics speakers bureau.

References:

- Cuckler JM. Unexplained pain: What should I do? Paper #39. Presented at the 26th Annual Current Concepts in Joint Replacement Winter Meeting. Dec. 9-12, 2009. Orlando, Fla.
- Willert HG, Buchhorn GH, Fayyazi A, et al. Metal-on-metal bearings and hypersensitivity in patients with artificial hip joints. A clinical and histomorphological study. *J Bone Joint Surg (Am)*. 2005;87(1):28-36.

CCJR Winter 2009 Meeting Highlights

- [Simple tool provides fast, easy method of orienting acetabular cups](#)
 - [Patient selection, planning can help avoid stiff knees after total knee replacement](#)
 - [Results of mobile bearing knee implant at 5 years may be comparable to fixed bearing design](#)
-