

## Soft-Tissue Changes and Osteoarthritis

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Osteoarthritis (OA) is [the most common form](#) of arthritis, affecting approximately 27 million Americans.<sup>1</sup> [Causative factors](#) are thought to be overweight, aging, joint injury or stress, and muscle weakness,<sup>2</sup> among others. Clearly there are many theories of causation, but still no definitive etiologies.

An interesting article<sup>3</sup> discusses whether musculotendinous changes in the deep hip rotators are either the sequelae of joint pathology or a contributing factor to degenerative joint changes. Mcknas, et al., found that in patients with OA of the hip, especially in the internal obturator tendon, there were more tendon ruptures with scar tissue, increased amounts of GAGs and calcium deposits, and lack of distinct inflammatory changes as seen in tendinosis of other areas of the body. They hypothesize that tendon pathology could increase symptoms already experienced by OA patients. It could be that inactivity or limited activity associated with OA is a factor involved in the development of tendinosis.<sup>4</sup>

[Meknas, et al.](#), think the possibility exists that OA may start in the tendon and then proceed to the joint, similar to rotator-cuff arthropathy in the shoulder. Radiofrequency microtenotomy of the small rotator muscle tendons in the hip region has reduced symptoms in patients with mild intrarticular degenerative changes, similar to treatment of patellar and rotator-cuff tendinosis. Mcknas and colleagues wonder whether early intervention in the tendinosis disease process reduces the symptoms of OA or even slows its progress.

It is interesting to note that the term *periarthritis* of the hip [has been changed](#) to hip *rotator-cuff* tears to *trochanteric tendinobursitis*.<sup>5</sup> Studies have shown that isolated hip bursitis is virtually nonexistent.<sup>6</sup> Although a bursitis may be present, the underlying causes are lesions of the overlying tendons of the gluteus medius and/or gluteus minimus; hence the use of the term *trochanteric tendinobursitis* rather than *trochanteric bursitis*.

Among 250 patients who had MRIs for the complaint of buttock, lateral hip or groin pain, [35 had tendinosis or tears](#) in the gluteus medius or minimus.<sup>7</sup> Patients with gluteus medius and minimus tears have gradual symptoms and complain of lateral hip pain radiating possibly to the thigh, buttock or groin. Usually it is a chronic complaint and the tendinobursitis primarily affects middle-aged or elderly women.

Physical findings may include painful end-range external rotation of the hip when flexed at 90°. Pain is almost always present when standing on the affected leg for 10 to 30 seconds. Use a single leg-stance. Probably the best test is resisting the externally rotated hip, patient supine with the hip and knee flexed at 90°. According to Lequesne, if this resisted position is negative, repeat the resistance test with the patient prone, hip extended and knee flexed at 90°. These resistance tests should [reduplicate](#)

the patient's symptom.<sup>5</sup>

Most doctors don't think of hip abductor tears as they do with the shoulder rotator cuff; as such, the condition may persist and recur despite all types of treatment. For these chronic cases ultrasonography or MRI should be considered. And as for the question of whether these tears are related to OA? As is often the case, more studies are needed.

### References

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