

## Don't Forget Ober's Test

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An important reason why many shoulder, back, pelvic, hip and knee complaints do not respond is due to the restriction of tissue on the lateral portion of the hip and thigh. Keith Innes<sup>1</sup> recently wrote about three fascial systems, one of which was the oblique dorsal-muscle/fascia-tendon sling which included: the latissimus dorsi; thoracodorsal fascia; thoracolumbar fascia; the contralateral gluteus maximus; the iliotibial tract; and the vastus lateralis muscle. Restrictions within this system will have widespread negative consequences throughout the human structure from the lower extremities to the shoulder.

The iliotibial band, part of what is called the *fascia lata*, is a strong, dense, broad layer of fascia that invests the muscles of the thigh like a stocking. This fascia lata encases the tensor fasciae latae (TFL), which pulls on the strap-like iliotibial tract, thereby steadying the trunk on the thigh. Three quarters of the gluteus maximus inserts into the iliotibial tract.

The fascia lata prevents the gluteus maximus from displacing the iliotibial tract posteriorly. The fascia lata has a direct connection to the anterior layer of the thoracolumbar fascia (which covers the iliacus and psoas) and to the posterior layer of the lumbodorsal fascia. The lumbodorsal fascia connects to the thoracodorsal and latissimus dorsi fascial component. The iliotibial band extends over the lateral femoral condyle past the knee to which it attaches on the lateral side, reaching Gerdy's tubercle, which is lateral to the tibial tubercle. Based on the location of the fascial interconnections just discussed, it is evident that a knee problem can be related to many structures, ending in this case with the latissimus dorsi connection to the shoulder.

Is it any wonder that a patient with a right-sided knee problem might complain of a right-sided hip, low back and shoulder problem, and for that matter, pain on the left side, too? By the way, the fascia lata is also continuous with the deep fascia of the leg (*fascia cruris*).

The Ober test<sup>2</sup> is an important factor in revealing that these problems exist, since it reveals an important lateral restriction. The patient lies on the uninvolved side with the lower knee flexed to help reduce lumbar lordosis. The examiner lifts the upper flexed or extended leg at the ankle while stabilizing the pelvis with the other hand, then abducts and extends the hip allowing the iliotibial band (ITB) to move posteriorly over the greater trochanter. The examiner then slowly lowers the upper leg. If the leg drops to the table, the test is negative; if it remains abducted, the test is positive. It is extremely important in performing this test to hold the patient's pelvis and keep it at a right angle to the table while moving the involved side.

Chronic greater trochanter bursitis is often related to a tight TFL. The TFL normally glides over the bursa allowing smooth motion of this muscle over the greater trochanter. Signs such as pinpoint tenderness over the bursa, painful passive hip adduction and resisted abduction of the hip with a positive Ober test help reveal this condition. Tightness of the ITB may also be related to the iliotibial band friction syndrome of the knee. Often local fascial release or friction massage to the greater

trochanter or ITB at the knee will take care of these conditions. On the other hand, if the local treatment of these areas does not improve the condition, it is necessary to evaluate the fascial restrictions related to the buttock, lower back or latissimus dorsi areas, i.e., the fascia of all the areas of the oblique dorsal-muscle/fascia-tendon sling. These areas must be palpated for the presence of painful fascial barriers and tested for shortness. The interconnection of fascia demands that a global view of the problem must be performed. Fascial treatment is often performed distant from the painful site.

### *References*

1. Innes K. The motion of systems and not their anatomy frequently defines a disorder. *Dynamic Chiropractic* 1999;17(9):18-19.
2. Hammer W. *Functional Soft Tissue Examination and Treatment by Manual Methods: New Perspectives*, 2nd ed. Gaithersburg, MD: Aspen, 1999, p. 227-228.

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