

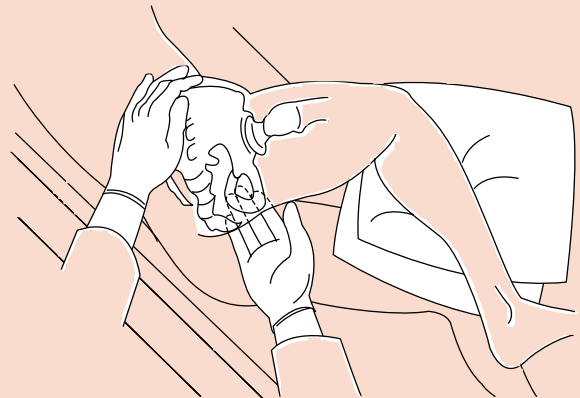


Externally Palpating the Pelvic Floor Muscles

- **Patient position:** Place the patient in sidelying with the top leg in approximately 60 to 80 degrees of hip flexion and the knee comfortably bent. Put two or three pillows under the top leg to provide stability in neutral abduction or adduction, and allow the patient to relax the leg fully. Total patient relaxation is necessary for deep PFM palpation.
- **Therapist's position:** The therapist is positioned behind the patient and finds the tip of the ischial tuberosity on the uppermost ilium.
- **Therapist's preparation:** This palpation may be done through underpants but is more effective if the fingers are on bare skin. The therapist should wear a latex or vinyl glove on the palpating hand because it will be close to the anus and perineum.
- **Hand position:** The most effective hand position is supination, and with all four fingers adducted in full finger extension. Keep the hand parallel to the table, and place the fingertips on the skin between the ischial tuberosity and the anus (just medial to the ischial tuberosity).
- **Technique:** Apply gentle inward pressure, directing your fingertips toward the anterior-superior iliac spine (ASIS) of the top ilium. Closeness to the ischial tuberosity results in the skin pulling taught and restricting deep palpation. In this case, reposition the fingers more medial toward the rectum, taking up some skin slack (see Figure). The levator ani muscles are rather deep, being the third layer in the pelvic floor. Depth from the skin varies greatly and can be more than 1.5 inches. When a firm resistance is felt, ask the patient to contract the pelvic floor muscles (PFMs). You should feel a firm PFM contraction pushing your fingers outward.

With the PFMs at rest, assess for pain, hypertonia, and connective tissue restriction in the usual manner. Angling the fingers anteriorly and posteriorly can give information about different areas of the levator ani muscle group. The obturator internus is a little more difficult to palpate. A review of anatomy is necessary to orient yourself to the location of the muscle in the sidelying position. Keep the

palpating hand in the position described previously, and gently change the angle of the hand so that the wrist and elbow drops and the fingers move upward into the tissue above. The obturator internus is located in this area. The muscle should feel somewhat soft. Have the patient contract the muscle to ensure correct location. External rotation can be tested by asking the patient to lift the top knee upward toward the ceiling while keeping the foot on the supporting surface. The therapist resists this motion with a hand on top of the knee. A small isometric contraction should result in palpable muscle tension. The palpation depth is important. Shallow palpation results in palpation of the medial ischial tuberosity. In this case, continue straight, inward pressure until the tissue releases to a deeper level, and then angle the wrist down and the fingers upward. Myofascial release of muscle or connective tissue can be carried out in this position if impairments are identified.



External palpation of pelvic floor muscles. (Adapted from Hoppenfeld S. *Physical Examination of the Spine and Extremities*. New York: Appleton-Century-Crofts. 1976.)