



Complete Diabetic Foot Exam [audio transcript]

This instructional video will review how to perform a complete diabetic foot examination.

To begin with, you'll need the following equipment: a ten-gram monofilament, a comfortable place to sit with good lighting, and a table on which the patient can prop up their feet for the examination, and an optional one-twenty-eight hertz (128 Hz) tuning fork.

To begin with, ask the patient if they have any history of foot problems such as previous ulcerations, ingrown toenails, foot infections, or previous amputations.

Then inspect the foot for acute problems, checking between the toes, on the bottom of the feet for cracks, on top for deformities, looking for bunions, claw toes.

And then examine the other foot in the same manner. Again, checking between the toes and examining the entire foot: palpating, looking for painful areas.

Next we examine the pulses. There are two sets of pulses on each foot: There's the *posterior tibial*, behind the inside ankle bone, and the *dorsalis pedis* on the dorsum of the foot, extending from the instep.

Palpate the *dorsalis pedis* and then the *posterior tibial*.

And examine the other foot. A normal exam is when you can palpate all of the pulses.

Next we perform the monofilament examination.

To perform the examination, you take the monofilament and apply it perpendicular to the skin, pressing down, just to the point of bending. Hold for a second and release.

We conduct the exam first on ourselves to illustrate to the patient that it is not painful. And then have them extend their hand.

Apply the monofilament so they have a reference point for what normal feels like. Then we test four spots on each foot: The great toe, the first metatarsal, second—I'm sorry—third, and fifth metatarsal heads.

Have the patient close their eyes and acknowledge "Yes" when they feel the monofilament.

"Yes" (patient)

"Yes" (patient)

"Yes" (patient)

"Yes" (patient)

And then we perform the exam on the other foot. With a normal exam being able to feel the monofilament on all eight areas.

Then we can perform the optional tuning fork examination.

Approximately ten to fifteen percent of people who can feel the monofilament are still at high risk for developing foot problems. Accordingly, some experts recommend performing a sensory examination other than the monofilament, if you have a normal monofilament exam.

The Indian Health Service (IHS) recommends using the tuning fork.

To perform the tuning fork exam, tap the tuning fork against the ball of your hand, and apply it to one of the great toe bones, you're applying it to the tip.

And have the patient acknowledge "yes" when they feel the vibration stop.

"Yes" (patient)

A normal exam is when the examiner and the patient feel it stop at the same time.

You can also apply it to the great toe joint, on top of the toe. And a normal exam is when the patient and examiner feel it stop at the same time.

"Yes" (patient)

And that is a normal exam.