

Pedograph Lab

Objective: The student will become familiar with the procedures used to assess the Diabetic foot using a pedograph.

Materials:

1. Pedograph
2. Gloves
3. Ink Roller
4. Legal Paper

Procedure:

1. **Setup:** The Pedograph should be set up before each use.
 - a. The pedograph should be re-inked with the roller before each use. The membrane with the raised grid is the side to be inked.
 - b. The paper should be placed between the grid and the bottom tray of the device.
2. **Weightbearing Static with Wall Assist B/L:** Used for patient with minimal mobility. Done with gloves and the patient standing, shoes and socks off.
 - a. The patient is instructed to stand with one shoulder against a wall.
 - b. Instruct the patient to take one side step away from the wall.
 - c. Instruct the patient to support themselves with their hand on the wall.
 - d. Have the patient raise the foot closest to the wall while supporting themselves with their hand on the wall.
 - e. Place the pedograph under the patient's foot nearest the wall. Make sure it is at the same angle and position as the reflective foot.
 - f. Have the patient lower their foot onto the Pedograph.
 - g. Instruct the patient to remove their hand from the wall and equalize their weight.
 - h. Instruct the patient to replace their hand on the wall for support.
 - i. Remove the pedograph.
 - j. Have the patient place their foot back on the floor, remove their hand from the wall.
 - k. Repeat for opposite side.
3. **Weightbearing Dynamic B/L:** Preferred method. Used for patients with good mobility. Done with gloves and the patient standing, shoes and socks off.
 - a. The patient is instructed to stand in the middle of the room.
 - b. The pedograph is placed on the floor directly in front of the foot to be assessed at the same angle as the foot to be assessed.
 - c. Assist the patient to take two steps backward, leading with opposite foot.
 - d. Instruct patient to begin walking with opposite foot.
 - e. The clinician should adjust the pedograph so that the foot is captured in the center of the grid as the patient walks over it.
 - f. Repeat for opposite side.
4. **Interpretation:** This is done with both left and right pedograph's side by side.
 - a. Even gray grid indicates even pressure
 - b. Dark spots indicate pressure areas
 - c. Smear spots indicate excessive motion

- d. Pressure under 2nd through 5th metatarsal heads may indicate possible Hallux rigidus/limitus
- e. Pressure under the 2nd metatarsal head may indicate possible Mortons Toe
- f. Pressure on the center of the heel may indicate possible heel spur
- g. Pressure on the lateral side of the foot may indicate possible supination
- h. Any of these may lead to preulcerative calluses in the Diabetic foot