

Leg Length Discrepancy Test

Patient information

Name: David Lawson

Date of birth: July 15, 1980

Date: June 19, 2024

Tests

Physical examination

1. Direct method

Test performed

Materials/equipment needed:

- Tape measure

Steps:

1. Measure from anterior superior iliac spine to medial malleolus.
2. Measure from anterior inferior iliac spine to lateral malleolus.
3. Repeat 2-3 times and take the average.
4. Compare measurements between multiple clinicians if possible.

Results:

Average measurement (ASIS to medial malleolus): 85 cm

Average measurement (AIIIS to lateral malleolus): 86 cm

Positive (limb length inequality present)

Negative (no limb length inequality)

2. Indirect method (Palpation and visual estimation)

Test performed

Materials/equipment needed:

- Blocks or book pages

Steps:

1. Palpate iliac crests or anterior iliac spines.
2. Use blocks or book pages under the shorter limb to level iliac crests.
3. Ensure to palpate and compare other pelvic landmarks if necessary.

Results:

Positive (limb length inequality present)

Negative (no limb length inequality)

3. PALM (Palpation meter)

Test performed

Materials/equipment needed:

- Palpation meter (PALM device)
- Tape strips

Steps:

1. Place two tape strips 15 cm apart on the ground.
2. Have the patient walk 10 steps and stand with feet aligned to the strips.
3. Place the PALM on the iliac crest and measure the distance between caliper heads.

Results:

Distance between caliper heads: 4 mm mm

Angle of inclination: 2 degrees

Positive (limb length inequality present)

Negative (no limb length inequality)

4. Block test

Test performed

Materials/equipment needed:

- Wooden boards of varying thickness

Steps:

1. Have the patient stand with feet 10 cm apart, knees extended, and weight equally distributed.
2. Place hands on bilateral anatomical landmarks (e.g., spina iliaca posterior superior, spina iliaca anterior superior, or crista iliaca).
3. Visually assess if there is a length inequality.
4. Place a 0.5 cm wooden board under the foot of the shorter side.
5. Continue adding thicker planks until the hips and shoulders are level.
6. Record the thickness of the final plank stack.

Results:

Resulting thickness of planks: 1.3 cm

Positive (limb length inequality present)

Negative (no limb length inequality)

5. Imaging and radiographic measurement

Test performed

Methods:

- Plain radiography (orthoroentgenogram, scanogram, teleoroentgenogram)
- Computed radiography
- Micro-dose digital radiography
- Ultrasound
- CT scanogram
- MRI scan

Specify the imaging method/s used: orthoroentgenogram)

Results:

Positive (limb length inequality present)

Negative (no limb length inequality)

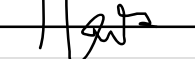
Additional notes:

I marked the tape measure test negative since there is a 2 cm margin of error. Anyway, the discrepancy measured is relatively small, but it could be contributing to his symptoms. David reported mild lower back pain and hip discomfort, especially after long periods of standing or walking. Recommend custom orthotics to help balance the limb length and reduce discomfort.

Healthcare professional's information

Name: Michael Harris

Title: Orthopedic Specialist

Signature: 

Date: Jun