**Peripheral Vascular System & Lymphatic System Assessment**

**Objectives:**

At the end of this lab, the students will be able to:

1 .Demonstrate the ability to safely & accurately complete Peripheral Vascular System & Lymphatic System assessment.

2.Demonstrate the ability to accurately document Peripheral Vascular System & Lymphatic System assessment data in organized manner.

**Equipment Needed:**

I .Occasionally need: paper tape measure

2.Tourniquet or blood pressure cuff.

3.Stethoscope.

4.Doppler ultrasonic stethoscope.

**Preparation**

I **.Room temperature should be proper.**

**2.Use inspection & palpation.**

Compare the findings with the opposite extremity.

Subjective data:

1. Leg pain or cramps

2. Lymph node enlargement

3. Skin changes

4. Medications

5. Swelling arms or legs

Inspect & palpate **both arms from the**

the shoulders for the following:

Size & shape.

Normal : Two arms should be symmetric in

Shape.

Edema, discoloration, skin,hair distribution .

Palpate both radial pulses.

Palpate both ulnar pulses.

Normal : Bilateral pulses strong & equal.

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Perform Allen Test to determine Patency of

& ulnar arteries:

- Place thumbs lightly over radial & ulnar

arteries & ask the client to clench tightly.

* Firmly compress arteries & ask open
* - Release pressure on the ulnar artery while pressure on the radial
* Normal : palm of hand becomes pink when release of ulnar or radial artery. artery.
* Allen’s test & complication of arterial puncher

Palpate the brachial pulses.

Palpate for presence of epitroclear

Lymph node : Shake hands with the client

- Reaching your other hand under client's

elbow to the groove between biceps &

triceps muscles

Bilateral pulses strong & equal.

Normally the lymph node not palpable. Free of pain

Inspect & palpate the legs

- Uncover the leg while keeping the genitalia draped

- Inspect both legs together for shape & size.

Edema, discoloration, skin hair distribution .

Inspect size of both legs:

- Measure the calf circumference with a non - stretchable tape **measure.**

- Measure at the widest point.

- Measure the other leg in exactly

same place, the same number of centimeters down from patella or land mark.

- **Record the findings in centimeters.**

Normally: Both legs should be symmetric in

size.

Palpate superficial inguinal lymph nodes. Small in size I cm or less, movable & non- tender.

Palpate femoral pulse by pressing below inguinal ligament.

Popliteal pulse: have the client knees or, if on table roll on to flex leg 90 degree, press deeply to

Posterior tibial pulse: located on malleolus.

Dorsalis pedis pulse: ***on the foot,***

Normal finding : Bilateral pulses strong & equal.

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Bilateral pulses strong & equal

(congenitally absent in 5%- 10%

of population).

**Special maneuvers:**

Check deep vein thrombosis & deep phlebitis.

Check Homan's sign by dorsoflexing **foot**

Client verbalizes no calf soreness or pain.

Check for varicose veins:

Mannual Compression Test:

- Put your client in standing

- Place one *hand on the lower part of the* varicose vein.

* Compress the vein with your about 15 to 20 **cm higher.**
* The finding: Competent valves will prevent a transmission

The trendelenberg test:

- Put the client in supine position.

- Elevate the involved leg 90'until the veins empty.

- Place a **tourniquet high on the thigh.**

- Help the client to stand up.

- take the tourniquet off

The finding : **saphenous veins should fill**

slowly from below .

Arterial insufficiency :

Changing Color :

- Raise both legs **about 30cm(12 inches)**

off the table.

- Ask the client to sit up with dangling legs over the side of the table.

. Normally **pink color returns.**

Normally 10 seconds or less.

Normally 15 seconds.