

Subjective Information

HEALTH HISTORY QUESTIONS

- ◆ What is the client's overall health history? Is there a history of cardiac, liver or kidney pathologies that may be causing the edema? Does the client have a local thrombophlebitis?
- ◆ Is the edema caused by a local or general infection (bacterial, viral, fungal or parasitical)? These conditions necessitate treatment modifications or contraindicate lymphatic drainage and massage, and medical referral if the client has not already seen a physician. Is the client on any medication for the above conditions, such as antibiotics?
- ◆ Has the client had surgery that may disrupt the lymphatics? Has the client had a portion of the lymphatic nodes removed due to a pathology?
- ◆ Does the client have a peripheral nerve lesion that may cause edema; for example, a median nerve lesion?
- ◆ Is the edema due to pregnancy or premenstrual sodium retention?
- ◆ Is the edema caused by position (standing for long periods of time or using a wheelchair) or by a rise in the temperature outdoors?
- ◆ Has there been a history of recurrent edema?
- ◆ How long has the edema been present? There is a greater possibility of fibrosis and hardening of the tissue with resultant tissue dysfunction the longer the edema has been present (*Harris, 1994*).
- ◆ If the edema is caused by an injury, when did the injury occur? What was done at the time of injury? What first aid applied? Was there swelling or hematoma or joint effusion within minutes to one hour of injury to a joint. The conditions.
- ◆ Did the client see a physician? Is the client on any medication?
- ◆ If the edema is traumatic, what was the mechanism? This includes self-massage.
- ◆ Is the client taking any diuretics?
- ◆ Is the client using any compression garments?
- ◆ Does the edema intensify with activity?
- ◆ What aggravates or relieves the edema? For example, a sprain, while elevation.

Objective Information

Observations

- 👉 Edema due to trauma is local and sometimes distal to the injury site. The area looks taut and firm. The edema usually increases with the severity of the injury. The amount of edema present in the acute stage diminishes as healing progresses through the early and late subacute stages. It is usually absent in the chronic stage but, with repeated injuries, edema may remain local to the lesion site.
- 👉 Edema due to local lymphatic obstruction involves the whole limb distal to the lesion site. The limb can be taut and firm or puffy and congested depending on the cause of the obstruction.
- 👉 Edema due to general systemic conditions affects the entire body. It is usually noted in all the extremities and may also appear on the face and around the eyes. Swollen areas appear puffy and congested. This edema may be mild, as with pregnancy or premenstrual sodium retention, or severe, as with chronic congestive heart failure or advanced kidney pathologies.
- 👉 Reddening of the skin in the edematous area may indicate infection, either bacterial (streptococcus) or fungal (mycosis) (*Kurz, 1990*).

Palpation

- 👉 Edema due to trauma is tender, hot, firm and local to the injury in the acute stage. These signs diminish as the healing progresses through the subacute and chronic stages. See the appropriate musculoskeletal chapter for more details.
- 👉 In the case of local or general chronic edema that is not trauma related, the tissue may be cool due to ischemia or warm due to congestion. It may be boggy or taut in texture. Tenderness may or may not be present.

Testing

- 👉 **AF** and **PR ROM** of the edematous limb are reduced. The amount of limitation increases with the severity of the edema.

Special Tests

- 👉 The extent of the edema is assessed with the **swelling or edema girth measurement**. A bilateral comparison is made with the unaffected limb.
 - With an acute injury, if a swelling occurs rapidly, a hematoma is indicated and the client should be referred for emergency medical attention.
- 👉 A **pitted edema** test is positive if chronic pitted edema resulting from a pathology is present.