Top 10 differential diagnoses in family medicine: Edema

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10. EDEMA

The most logical approach to the diagnosis of edema is of course to first think whether it is localized or generalized, then whether or not it is pitting.

LOCALIZED EDEMA
Most commonly involving one or both lower limb, the most common causes are:
- venous insufficiency;
- immobility or trauma;
- cellulitis;
- ruptured Baker’s cyst;
- thrombophlebitis; and
- DVT.

Lymphedema (from lymphatic obstruction) is rarer, and classically produces non-pitting edema, as opposed to most other causes which rely on transuded fluid from the venous system (whether because of oncotic factors, i.e. low albumin, or because of high venous pressure, e.g. CHF or abdominal compression), and thus cause pitting. Obesity can of course mimic edema, and this is called pseudoedema. Pregnancy or an abdominal mass can compress the inferior vena cava, leading to bilateral lower limb edema. In the tropics, the differential is much broader and would include the filariases (e.g. elephantiasis).

GENERALIZED EDEMA (SYSTEMIC DISEASE)
One must always consider:
- CHF;
- renal insufficiency;
- cirrhosis;
- malnutrition or protein-losing enteropathy;
- drugs (calcium channel blockers, NSAIDs);
- myxedema; and
- premenstrual syndrome.

CHF—congestive heart failure; DVT—deep vein thrombosis; GI—gastrointestinal; HTN—hypertension; NSAIDs—nonsteroidal anti-inflammatory drugs; NYD—not yet diagnosed; PVD—peripheral vascular disease.

For a pdf of the Top Ten Differential Diagnoses in Family Medicine pamphlet or to access the slide show on-line, go to http://www.familymedicine.uottawa.ca/eng/TopTenDifferentialDiagnosisInPrimaryCare.aspx.

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