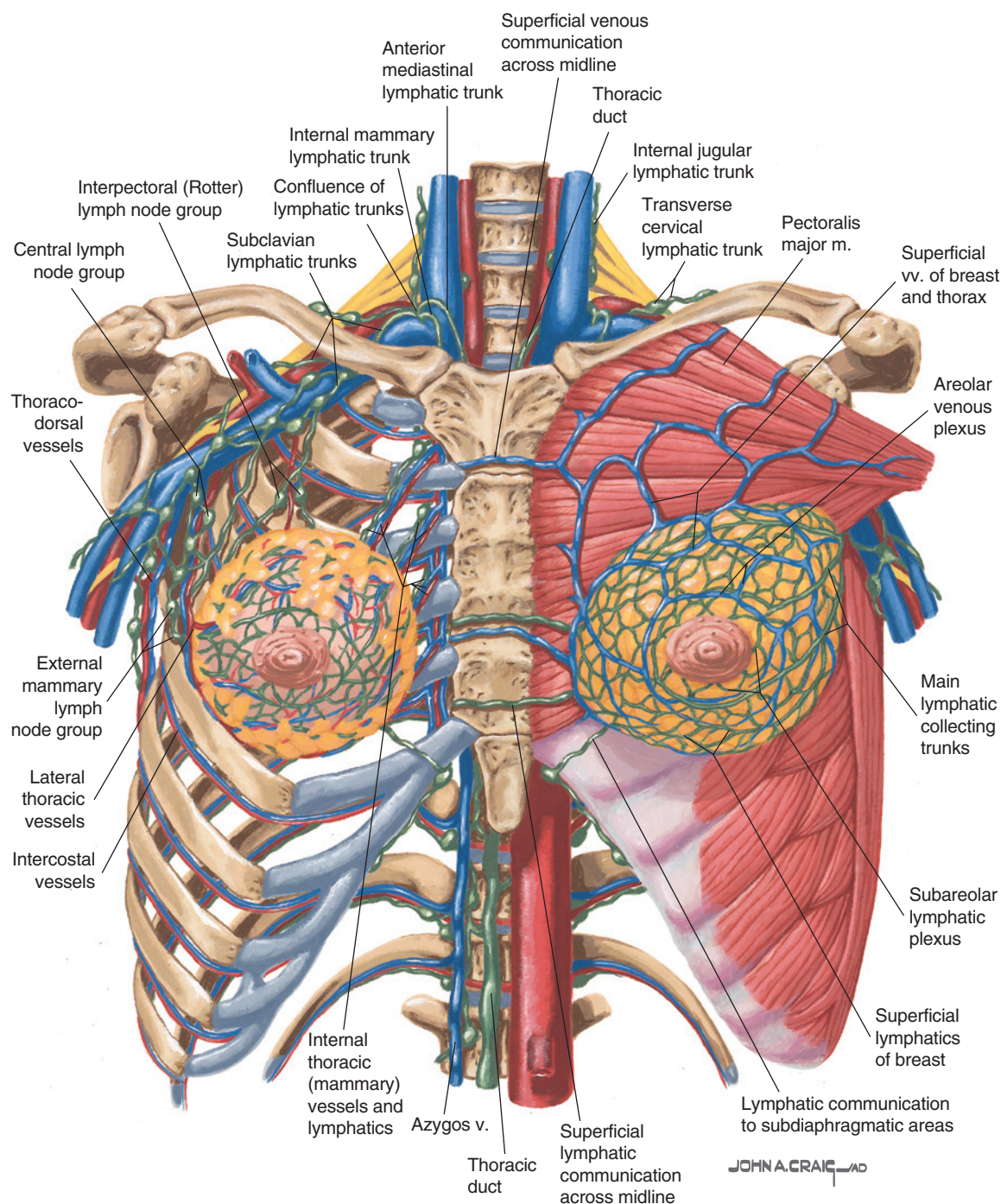


**Figure 8.2** Lymphatic anatomy of the lower extremity. (Reprinted from Netter Anatomy Illustration Collection. ©Elsevier Inc. All Rights Reserved.)



**Figure 8.3** Lymphatic anatomy of the upper body. (Reprinted from Netter Anatomy Illustration Collection. ©Elsevier Inc. All Rights Reserved.)

forms of lymphedema with some lymphatic function still intact.

There is a role for all of these procedures, but to provide some context, the goals of the patient and stage of disease become important. A patient with elephantiasis and irreversible skin changes facing potential amputation may be a candidate for a more radical excisional procedure such as the Charles procedure, or one of its more recent iterations. Liposuction is most appropriate for a patient with late-stage lymphedema and a mostly fatty limb confirmed by Brorson's guidelines: less than a few millimeters of pitting edema after

pressing the thumb into the patient's limb for 1 min at maximal pressure.<sup>28–34</sup> If this patient is 100% compliant and is willing to wear lifelong compression, sustained volume reduction has been demonstrated over the long term.<sup>28</sup> However, many patients are unable or unwilling to wear constant compression, and do not present with an advanced fibrofatty limb. These fluid-dominant patients may not be good candidates for debulking procedures and this is where physiologic procedures such as LVA and VLNT have played a significant role. There is a host of different microsurgical procedures that have had reported successes, including