

Table 3.5 Comparison of attributes of “workhorse” bone pedicled and free flaps

	Fibula bone with peroneal perforator flap	Humerus bone with lateral arm flap	Iliac bone with iliac flap	Rib bone with pectoralis major flap	Radius bone with radial forearm flap	Scapula bone with scapular/parascapular flap	Scapula bone with trapezius flap
Ease of dissection	Easy	Moderate	Difficult	Easy	Moderate	Moderate	Moderate
Anatomic anomalies	No	No	Minimal	No	No	Sometimes	Sometimes
Potential for harvest as compound flap/component tissues that can be included	Yes/muscle, skin	Yes/fascia, tendon	Yes/muscle	Yes/skin	Yes/fascia, tendon	Yes/muscle	Yes/skin
Contour (thin → bulky)	Thin	Moderate thickness	Bulky	Moderate thinness	Thin	Moderate thickness	Thin
Implant osseointegration	Yes	No	Yes	No	Unlikely	Maybe	Maybe
Donor site morbidity	Limited	Minor	Sometimes significant	Minimal	Major	Minimal	Minimal
Bone length	Long	Very short	Moderate	Minimal	Short	Short	Short
Vascular pedicle caliber	Large	Moderate	Moderate	Moderate	Large	Large	Moderate
Vascular pedicle length	Moderate	Moderate	Moderate	Minimal	Long	Long	Minimal
When used as pedicled flap							
Arc of rotation	Moderate	Limited	Very limited	Large	Moderate	Large	Moderate
Reliability	Best	Somewhat	Good	Somewhat	Moderate	Very	Somewhat
Need for supercharge	No	No	No	No	Possible, if distally based	No	No
Potential for harvest as distally based	Possible	Possible	No	No	Yes	No	No
Need for delay procedure	No	No	No	No	No	No	No

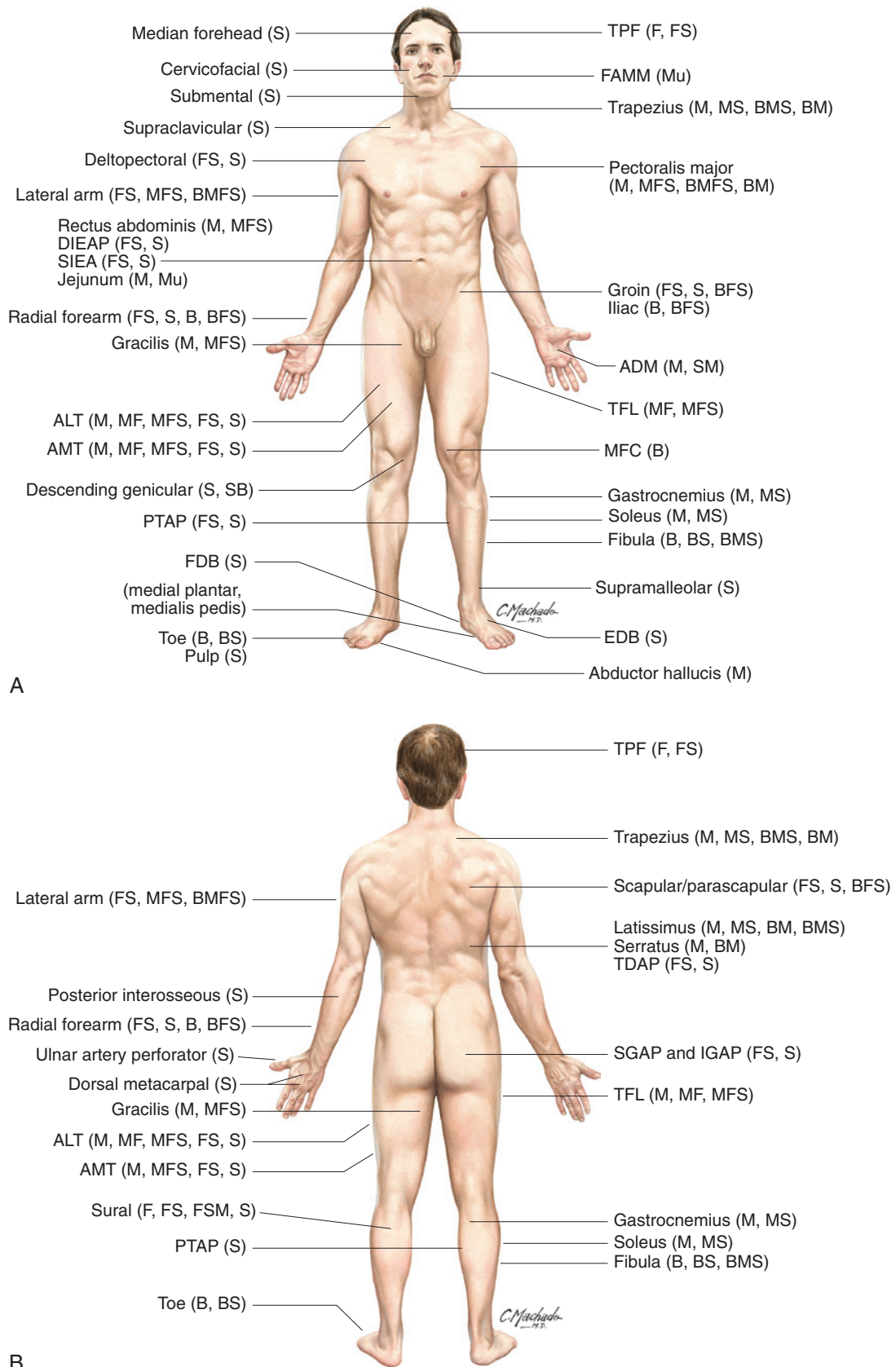


Figure 3.1 (A,B) Conventional and perforator-based workhorse flaps available in several regions of the body. Tissue types and some potential combinations that can be carried with the flaps are mentioned: B, bone; M, muscle; S, skin; F, fascia; Mu, mucosa.