CASE 12.1 Exposure of the Brachial Artery in the Medial Arm

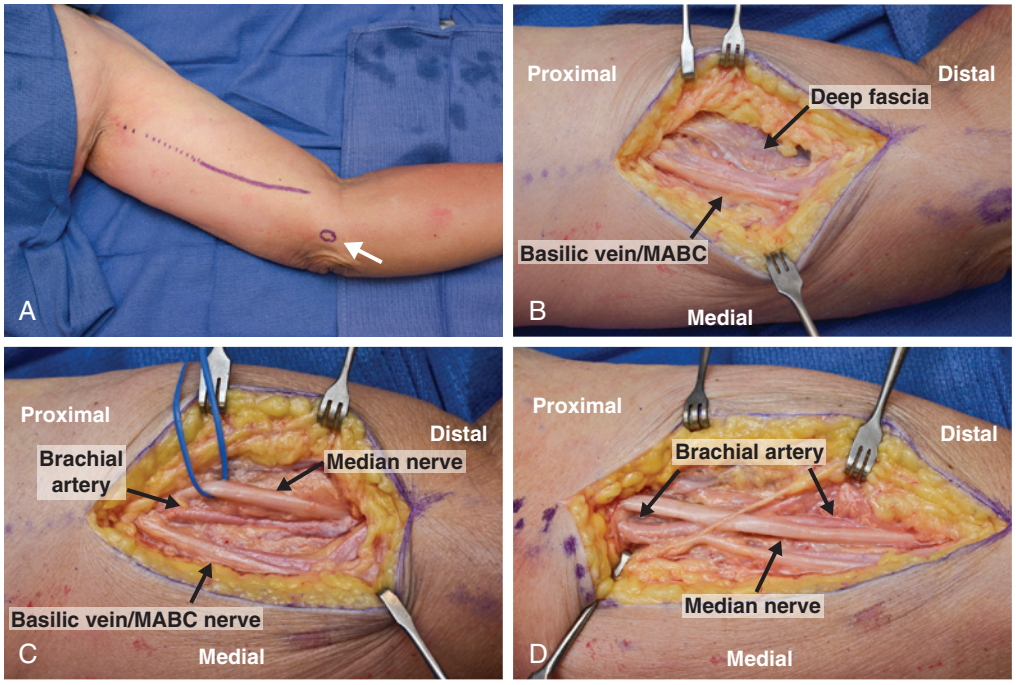

Figure 12.6 Case 12.1: Exposure of the brachial artery in the medial arm. (A) The brachial artery is palpated in the medial arm and an incision is made in the bicipital groove, medial to the biceps tendon (white arrow, medial epicondyle; blue line, bicipital groove). (B) The basilic vein is located in the subcutaneous plane in the distal half of arm, and is accompanied by the medial antecubital cutaneous nerve (MABC). These structures are preserved and retracted posteriorly, and the deep fascia of the anterior compartment is incised. (C) The deep fascia is incised and blunt dissection reveals the median nerve, brachial artery and its venae comitantes. (D) The median nerve lies anterior to the artery proximally, but crosses to lie more medial to the artery in the distal arm.

CASE 12.2 Exposure of the Distal Brachial Artery and Its Bifurcation in the Antecubital Fossa

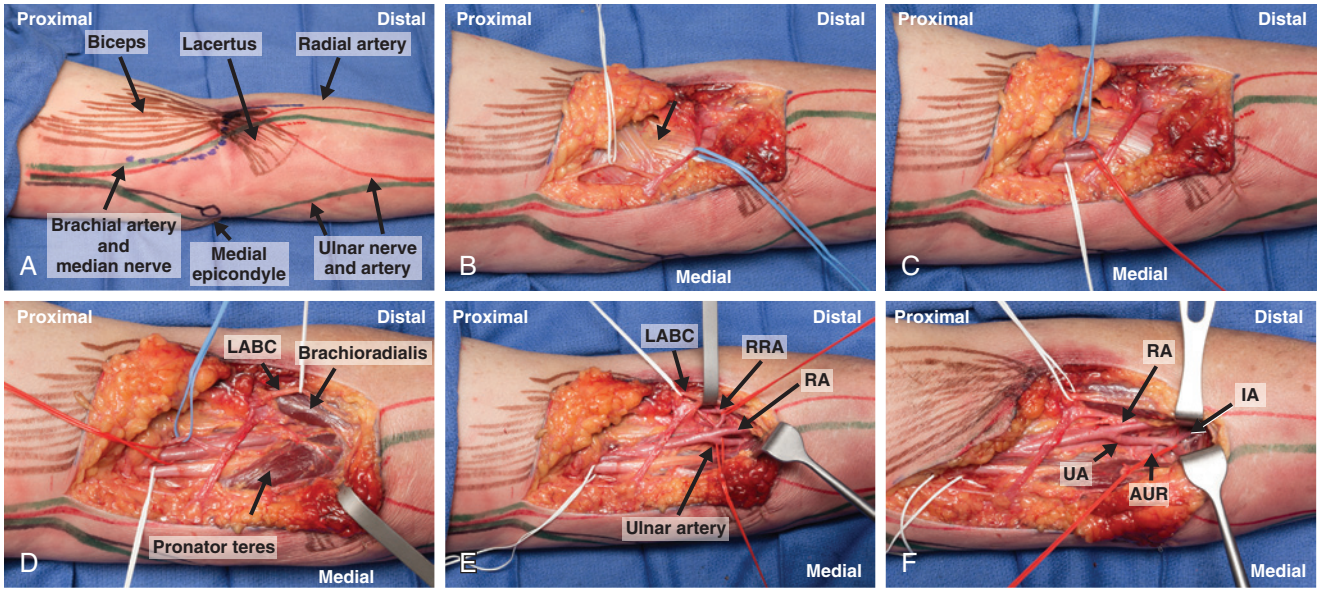

Figure 12.7 Case 12.2: Exposure of the distal brachial artery and its bifurcation in the antecubital fossa. (A) The brachial artery is easily palpable in the distal arm medial to the biceps tendon. An incision (blue dotted line) is made directly overlying the artery. If more distal exposure is required, the incision can be extended laterally into the elbow crease and continues distally in the radial aspect of the proximal forearm along the medial aspect of the brachioradialis muscle belly. (B) The median antecubital vein (blue loop) and branches of the medial antecubital cutaneous nerve (white loop) are protected. The deep fascia of the arm and the lacertus fibrosus (black arrow) are exposed. (C) The deep fascia is incised identifying the median nerve (white loop) medially and the brachial artery (red loop) with its venae comitantes (blue loop) lateral to the nerve. (D) To expose the brachial artery bifurcation, the lacertus fibrosus is incised, the pronator teres muscle is retracted medially and the brachioradialis muscle belly is retracted. The lateral antebrachial cutaneous nerve (LABC) lies on the lateral side of the fossa, on the brachioradialis muscle and should be protected. (E) With the muscles retracted, the bifurcation is easily accessed. The radial artery (RA) gives off a large recurrent radial branch (RRA) early and this can be used as a recipient vessel. (F) Dissection of the ulnar artery (UA) exposes the anterior ulnar recurrent (AUR), and the common interosseous artery (IA), which usually arises on its lateral side.