

**8 and 9. Ligation of the Axillary Artery.**—This artery is ligated in its first portion just after passing over the first rib, and in its third portion in the axilla.

8. *Ligation of the First Portion of the Axillary Artery.*—The arm is drawn away from the side, and an incision about three inches in length is made in the line which marks the division between the upper and lower parts of the pectoralis major muscle. The superficial and deep fascia must be divided on a director. The muscular interspace is then to be sought for, and the two parts of the muscle separated, working up toward the clavicle, and not directly backward. As this is done, the arm should be brought back to the side so as to relax the parts. The costo-coracoid membrane is next to be found and opened on a director. The artery lies beneath it. It is to be carefully isolated from the axillary vein, which lies on its inner or lower side, and the axillary nerves, which lie to its outer side. The ligature should be passed from within outward, or from below upward.

9. *Ligation of the Axillary Artery in the Axilla.*—This is the most accessible part of the artery. It is reached by drawing the arm away from the body, and making an incision about three inches long over the course of the vessel, at the junction of the anterior and middle thirds of the axilla. The deep fascia must be divided on a director, and the artery will be found beneath it, with the axillary vein on the ulnar side (toward the back of the arm) and the median nerve on the radial side (toward the front of the arm). The ligature should be passed from the ulnar toward the radial side so as not to injure the vein.

10. **Ligation of the Brachial Artery**, in the middle of the arm.—An incision about two inches in length is to be made along the inner edge of the swell of the biceps muscle at the middle of the arm. After dividing the skin and superficial fascia and any fat that may be met with, the fibrous membrane which incloses the biceps muscle will be encountered. This is to be divided on a director, and the loose connective tissue along the edge of the muscle broken up, when the artery will be exposed. Care must be taken not to divide the median nerve, which crosses the brachial artery near its middle, passing from the radial toward the ulnar side, and not to include it in the ligature. The venæ comites lie one on each side of the artery.

11. **Ligation of the Radial Artery**, in the upper third.—An incision is to be made in a line drawn from the middle of the bend of the elbow to the point at which the pulse can be felt at the wrist. The median vein is to be avoided in incising the superficial fascia. When the deep fascia has been exposed, a yellow line, marking the division between the supinator longus, on the radial side, and the pronator radii teres, on the ulnar side, is to be looked for. The fascia is to be opened along this line, and the artery will be found below it. The radial nerve lies to the radial side of the artery, but so far away as to be in little danger of being injured.

12. **Ligation of the Ulnar Artery**, in the lower third.—An incision is to be made in the depression between the flexor sublimis digitorum and the flexor carpi ulnaris, just above the carpus. The skin and superficial fascia are to be divided, and then the deep fascia is to be picked up with the forceps and divided on a director. The artery will be found lying on the pronator quadratus, alongside the tendon of the flexor carpi ulnaris, with the ulnar nerve on its ulnar side. The ligature should be passed from the ulnar toward the radial side, avoiding the nerve.

13. **Ligation of the External Iliac Artery.**—An incision is to be made nearly parallel to Poupart's ligament, and about an inch above it, extending from about an inch above the anterior-superior spinous process of the ilium to a point near the external abdominal ring. This incision should curve