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New Position and Landmark for the Deltopectoral Approach

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Dear Editor,

The deltopectoral approach is most common in shoulder surgeries. One important step in this approach is to find a cephalic vein as the indicator of the deltopectoral interval. Although several landmarks have been explained, "finding the vein" is a matter of difficulty, stress, and time exercise (1, 2) if the position of the arm and skin incision is not appropriate, especially for junior surgeons and residents. In this situation, extra and unnecessary dissections must be made to find the interval. We found a new position and skin landmark that seriously helps the surgeon to find the vein. We used this method in 50 consecutive patients and observed no problem in finding the deltopectoral interval. Majority of the references suggest palpating deltopectoral groove but this is so hard in obese and non-muscularized patients. Owing to using this position and landmark, finding the vein was an easier work, especially in obese and non-muscularized patients as mentioned before. The ideal position is 20 degrees of abduction and about 20 degrees of external rotation; in this point, often a fold appears in the axilla (Figure 1A). In some obese patients, more external rotations are needed to form this fold. After appearing this fold, the line of incision is from the coracoid process to the lateral border of the fold and the vein will be found in this line (Figure 1B).

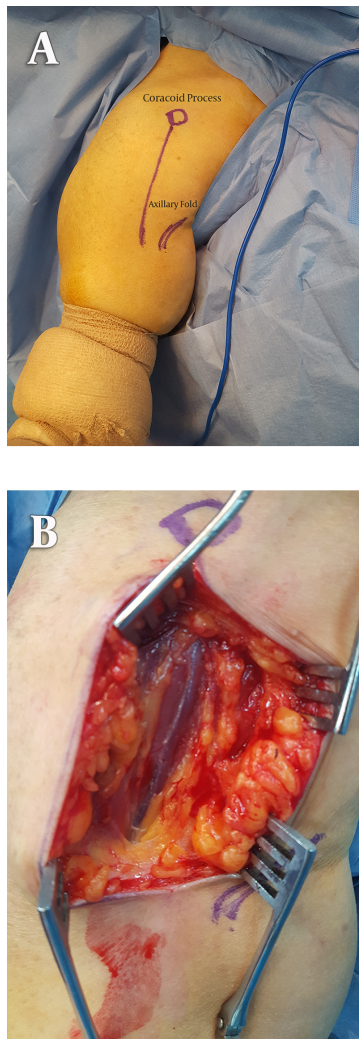

Figure 1. A, Skin landmarks for the deltopectoral approach; B, Cephalic vein as the indicator of deltopectoral interval

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