Double Oberlin Procedure and Spinal Accessory Nerve to Suprascapular Nerve Neurotization

Hitesh Inder Singh Rai, Deepak Agrawal

1Department of Neurosurgery & Gamma-Knife, All India Institute of Medical Sciences, New Delhi, India

Neurotization or nerve transfer refers to the transfer of a functional nerve to a denervated nerve, in order to recover some function of the injured nerve, thereby converting a high-level injury to a low-level one. The two most common procedures in the treatment for brachial plexus injuries have been described diagrammatically. Double Oberlin procedure is performed in partial brachial plexus injuries, which involve injury to musculocutaneous nerve and preservation of function of ulnar and median nerves. It involves donor fascicle from superolateral portion of ulnar nerve to the nerve to biceps muscle and donor fascicle from medial portion of median nerve to the nerve to brachialis muscle to recover elbow flexion. Another common nerve transfer procedure involves donor fascicle from spinal accessory nerve (SAN) to suprascapular nerve (SSN) to recover shoulder abduction, external rotation and stabilization partially. Brachial plexus formation and nerve transfers have been shown here with the important nerves and their relation to one another and brachial artery.

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Conflict of Interest
None declared.

References

Fig. 1 Right brachial plexus showing double Oberlin procedure and spinal accessory nerve (SAN) to suprascapular nerve (SSN) neurotization.