The most severe brachial plexus injuries usually result from car or motorcycle accidents. Severe brachial plexus injuries can leave your arm paralyzed, with a loss of function and sensation. Surgical procedures such as nerve grafts, nerve transfers or muscle transfers can help restore function.

Traumatic brachial plexus injury is generally severe, and in many cases associated with surrounding tissue injury, which makes them hard to diagnose at the right time.

Although rare, non-war-related severe brachial plexus injuries represent a group of patients carrying high risk of insufficient functional recovery regardless of treatment modality, or surgical technique. Epidemiological and etiological data are therefore very important to identify the groups in risk and to induce preventive actions aimed at these patients [1].

Depression after brachial plexus injury

Data were collected retrospectively on all patients who underwent brachial plexus reconstruction to restore elbow flexion between 2005 and 2013. Elbow flexion, graded via the Medical Research Council scale, was assessed at latest follow-up. Multiple variables, including the presence of Axis I psychiatric diagnoses, were assessed for their association with the dichotomous outcome of Medical Research Council scale score ≥3 (antigravity) vs <3 elbow flexion. Standard statistical methods were used.

Thirty-seven patients met inclusion criteria. The median postsurgical follow-up time was 21 months. Operations included neurolysis (n = 3), nerve graft repair (n = 6), and nerve transfer (n = 28). Depression was present in 10 of 37 patients (27%). Of variables tested, only depression was associated with poor elbow flexion outcome (odds ratio: 6.038; P = .04).

Preoperative depression is common after brachial plexus injury. The presence of depression is associated with reduced elbow flexion recovery after reconstruction. This data suggest assessment and treatment of preoperative mental health is important in designing a comprehensive postoperative management plan to optimize outcomes and patient satisfaction [2].

1)
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2)
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