

"ERB'S PALSY; THERE IS A NEED TO IMPROVE SURGICAL INTERVENTION IN PAKISTAN CURRENT ORTHOPEDIC PRACTICE"

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Abstract:

Restoring external rotation is real challenge in patient with erb's palsy. Early conservative treatment responds well to reduce disability, but there is a need to treat residual disability in patients with erb's palsy with surgical interventions. Erb's palsy has been remaining a challenging condition and recovery is slow, that's why there should be some palliative procedures like tendon transfer to prevent further dysfunctioning and disability. Combine loss of active elevation and shoulder external rotation (CLEER) is also seen in many patients due to absence of both teres minor and infraspinatus muscles. Currently there are limited services in Pakistan for patient with erb's palsy to restore external rotations. External rotation plays a major role in activity of daily life and we can minimize the disability in these children if there is facility and innovation in the field of orthopedic surgical intervention in restoration of external rotation and residual disability.

INTRODUCTION:

Surgical intervention play a vital role in the rehabilitation of erb's palsy in the form of tendon transfer, rotation osteotomy, derotational humeral osteotomy, shoulder reconstructions, nerve grafting and arthroscopic release^[1-4]. Early conservative treatment responds well to reduce disability, but there is a need to treat residual disability in patients with erb's palsy with surgical interventions^[5, 6].

EXTERNAL ROTATION IS DIFFICULT TO RESTORE:

In current practice it is seen that restoring external rotation in patient with erb's palsy is very difficult with the help of conservative treatments, and there is always need of a surgical intervention to restore external rotation^[7, 8].

REASONS AND CAUSES IN LIMITED RECOVERY:

There are many reasons in limited recovery in external rotation. Imbalance in sound muscle strength and affected muscles strength, imbalance in muscle strength recovering from the injury, internal rotation dominancy,

shoulder capsular injury and imbalance in functional reinnervation of muscles are some important factors that causes limited recovery in shoulder external rotation. Glenoid part of shoulder is usually concave but it can show biconcavity due to hypoplasia, retroversion, flattening of shoulder head and posterior subluxation of capsule that contributing factors to keep shoulder in internal rotation and difficulty in external rotation of shoulder^[9]. This extra internal rotation is another contributing factor in limitation of shoulder abduction and some time in elbow flexion^[9].

CURRENT SURGICAL INTERVENTIONS:

Erb's palsy has been remain a challenging condition and recovery is slow, that's why there should be some palliative procedures like tendon transfer to prevent further dysfunctioning and disability^[10]. Combine loss of active elevation and shoulder external rotation (CLEER) is also seen in many patients

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due to absence of both teres minor and infraspinatus muscles. A surgical techniques was hypothesized to restore active elevation and external rotation in which reverse shoulder arthroplasty associated with latissimusdorsi/teres minor transfer was used that showed satisfactory improvements in active elevation and shoulder external rotation [7]. To restore the external rotation in patients with erb's palsy, another surgical techniques was applied on 05 years old child in which trapezius muscles transfer was used [11]. Supra scapular nerve is also responsible in the recovery of external rotation, supra scapular neurotization also was tried, and a fair range of true external rotation can be achievable [12].

CONCLUSION:

Currently there are limited services in Pakistan for patient with erb's palsy to restore external rotations. External rotation plays a major role in activity of daily life and we can minimize the disability in these children if there is facility and innovation in the field of orthopedic surgical intervention in restoration of external rotation and residual disability.

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