Objective: Since elbow extension is a passive movement when shoulder is adducted and at secondary importance comparing elbow flexion, muscle transfer to triceps is not commonly mentioned in obstetrical palsy literature. This need was observed specially in patients whom had improved shoulder abduction with surgery but have limited elbow extension.

Method: Previously, we had operated on 13 patients with elbow extension restoration ages between 5-16 years. We used brachioradialis muscle in 6 patients, brachialis muscle in 6 patients and posterior deltoid muscle in one patient with pros and cons of each method. Later on depending on the anatomic studies for lower trapezius transfer in order to have better shoulder external rotation, we used ipsilateral lower trapezius muscle by elongation with tensor fascia lata graft to triceps muscle, in 7 obstetric palsy cases.

Results: Average elbow extension was improved 40 degrees and shoulder abduction was improved 30 degrees in our patients.

Conclusion: Ipsilateral lower trapezius transfer is a good technique for triceps function restoration with minimal donor side morbidity.