

SIX2: THORACOSCOPIC THYMECTOMY FOR MYASTHENIA GRAVIS IN CHILDREN: SHOWING FIRST RESULTS OF FEASIBILITY AND EFFICACY

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Background Background: Myasthenia gravis (MG) is a complicated autoimmune neuromuscular disorder that leads to skeletal muscle weakness. For the effected patients such a pathology leads to difficult living and social incompleteness. In the pediatric population with non-thymomatous MG thymectomy is recommended for generalized MG with or without detectable acetylcholine receptor (AChR) anti-bodies. Its value is still unclear but the main goals of the procedure are: to minimize the dosage and duration of immunosuppressive (IS) therapy; to avoid the potential complications of IS therapy; indications for surgery in unsatisfactory conservative treatment.

Materials and methods Materials and Methods: In the last 26 months in our department there were 7 children with MG that underwent a thoracoscopic thymectomy. The average age of patients was 14 years \pm 8 months, most of them were girls n=5 (71,4%). Five (71,4%) patients presented with generalized MG Class IIIa, one (14,3%) child had thymomatous MG Class IIIa and the presence of thymoma was found after clinical presentation of MG, and one (14,3%) patient ocular MG Class III with tendency to generalization. Prior to operation all the patients had immune laboratory testing, a chest X-ray, and a CT of the thorax. Indications for surgical treatment were assigned by a neurologist. In 6 (85,7%) cases we performed thorocscopy from the left sided, and in 1 (14,3%) case from the right. For the thoracoscopic thymectomy we used a 10mm camera positioned in the 5th intra- costal space at the medial axillary line, and 5mm trocars set up in the triangular fashion. For the dissection of the thymus we used blunt and sharp dissection with coagulation and Ligasure. The median time of operation was 90 \pm 20 minutes. All patients had a chest tube placed.

Results Results: There were no complications. Children started drinking and feeding mesh food the next day after operation. Chest tubes were remover on the 1-2 post- op day after performing a chest X-ray. None of the patients needed narcotic analgesics. The length of hospital stay was 4-5 days. All the patients became Class 1 within an average follow up of 15 \pm 4 months. They all had restoration of muscle activeness with out any weakness, with the minimization of IS therapy dosage. In result surgical treatment improved their quality of life.

Conclusions Conclusion: In non-thymomatous MG, thymectomy is carried out as an optional treatment when unsatisfactory results are seen after administering IS therapy. We believe that thoracoscopic thymectomy is a feasible and effective method of surgical treatment.