Results of Microscopic Selective posterior tibial neurectomy in treatment of spasticity in children with cerebral palsy
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Background: Spasticity is a major problem for patients, their families and physicians. Cerebral palsy is the most common cause of spasticity and physical disability in children. Treatment of spasticity involves multiple modalities that most commonly include observation, physical and occupational therapy, orthotics, medications, intramuscular injections, and neurosurgical and orthopedic surgery. Patients & Methods: 20 patients with foot spasticity due to cerebral palsy were operated upon at Cairo University hospital with a selective posterior tibial neurectomy. Pre-operatively all patients underwent a standard neurological examination, complete history and physical examination. Microscopic selective posterior neurectomy was done for all patients. Results: Our study included 14 males (70%) and 6 females (30%) with mean age of 5 years (range3 – 8). Preoperative ashworth scores mean was 3 with a range of 3 to 5. Outcome was measured with both the ashworth score and with patients families subjective improvement in ease of care (excellent, good , fair , none). Post-operative ashworth score mean was 1.8 with a range of 1 to 3. Outcome was excellent in 25% of cases, good in 45 % of cases, fair in 25% of cases and poor in 5% of cases. Conclusion: Microscopic Selective posterior Tibial Neurectomy is effective in improving the function of lower limbs and decreasing deformity and parent satisfaction. In addition, it is a cheaper modality on the long run.

Key Words: Selective posterior tibial Neurectomy – Outcome – Cerebral Palsy