

Selective rehabilitation of peripheral facial palsy for idiopathic and traumatic palsy

Dear Editor,

Following our previous study which confirmed the positive effect of selective physical therapy for posttraumatic facial palsy, we investigated the potential benefit of such therapeutic approach for idiopathic facial palsy¹. We compared the results for traumatic and idiopathic palsy which is particularly important since the etiology of facial palsy is diverse. The literature lacks papers that precisely define the effect of facial rehabilitation on the different etiology of peripheral facial palsy. Also, no existing data quantify the effect of such recovery neither the influence of various causes on the treatment outcome. Homogenous groups of palsy based on intensity and type of facial deficit must be analyzed to describe the results of therapy accurately.

We conducted a prospective study of 54 patients with residual facial weakness that were medically treated. The cause of facial palsy was idiopathic in 37 and traumatic in 17 patients. Patients were divided into four groups, those with difficulty I) in the initiation of movement, II) during movement (facilitation), III) of movement control, IV) of relaxation after movement². The control group comprised of 14 patients who had no physical therapy, during the same observation period. All patients received corticosteroid treatment 1 mg/kg, with dose reduction up to one month. We used the facial grading system (FGS) and facial disability index (FDI) for evaluation of the treatment outcome.

Physical therapy improved all parameters, particularly at rest and during movement for group I, and reduction of synkinesis for groups III and IV. Idiopathic facial palsy showed better overall success than the traumatic palsy. When compared to the control group, patients showed the best improvement in rest status and synkinesis, especially in group I of idiopathic palsy. The same was verified for rest status for group II, movement for groups II and IV, and synkinesis for groups I and IV of traumatic palsy.

The values of FDI test during the initial evaluation of patients were the worst for physical function in group I, while social function was mostly altered in group IV. Traumatic facial palsy again produced more facial nerve alterations. Physical therapy significantly improved all parameters, particularly when initial changes were more pronounced. Compared to the control group, we observed the best improvement for social function in group IV for idiopathic palsy, as well as for physical function for groups I and III, and social function for group III of traumatic palsy.

Current physical therapy protocols for facial palsy are not directed to the differences in muscular activity, which could be the cause of their limited success in peripheral facial palsy. Individualized facial neuromuscular rehabilitation is more effective in improving facial symmetry in patients with Bell's palsy than conventional therapeutic measures. Also, the patients with remaining symptoms of Bell's palsy appear to experience positive effects from a specific training program³. We previously documented the importance of selective rehabilitation of traumatic facial palsy. This is the first study to compare the differences when treating idiopathic and traumatic facial palsy, indicating that etiology should also be taken into consideration when planning and applying rehabilitation of peripheral facial palsy¹. We found more intense changes in FGS and FDI scales for the traumatic palsy as more significant neuromuscular damage is anticipated in these patients. Thus, physical therapy for traumatic palsy is of greater importance than for idiopathic one. This is in contrast to previous statements that etiology of peripheral facial palsy is not important². According to our results, individualized physical therapy of peripheral facial palsy according to etiology and intensity of deficit can have important clinical contribution to recovery.

References

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Conflict of interest

None.

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Stankovic I, Colovic H, Zivkovic V

Clinic for Physical Therapy and Rehabilitation, Clinical Center Niš, Serbia

Corresponding author: Professor Ivona Stankovic, MD, PhD, Clinic for Physical Therapy and Rehabilitation, Clinical Center Niš, Faculty of Medicine, Bul. Z. Djindjica 48, 18 000 Nis, Serbia, tel: +381 063 8453291, e-mail: ivona@medfak.ni.ac.rs