31 COMPARATIVE STUDY BETWEEN HYDROKINESIO THERAPY AND CONVENTIONAL PHYSIOTHERAPEUTIC MODALITIES IN PERSPECTIVE OF ROTATOR CUFF IMPINGEMENT: A PILOT STUDY

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Hydrokinesio therapy means active physical rehabilitation modality with the help of buoyancy, relative density, resistance and turbulence of water in swimming pool or tub. The aim was to evaluate the effect of the said therapy over conventional physiotherapeutic modalities, for example, mobilisation, manipulation in the cases of rotator cuff impingement. Twenty cases (10 males, 10 females with a mean age of 20 years) of rotator cuff impingements of different aetiologies with duration of pain of 8–12 weeks were divided arbitrarily into two groups. Modified DASH and ASES questionnaire were used to define pain perception and improvement. Goniometer was used to measure the pain-free range of movement. One of the groups (group A) was given different conventional physiotherapeutic modalities for 6 days a week (once daily) for 3 weeks and was compared against hydrokinesio therapy (group B) protocol (aquatic PNF, bad ragaz ring method, water pilates) once daily for 45 min for 3 weeks. Data were analysed statistically by means of improvement in range of motion of the affected shoulder joint and pain perception. p Value < 0.05 was taken as statistically significant. Eight patients (group B) were satisfied with hydrokinesio therapy. Their DASH score was decreased 25 ± 5 whereas in group A the reduction was 15 ± 6 . Moreover, cases of group B showed significant improvement in painless range of motion ($30^\circ \pm 5^\circ$), compared with group A ($18^\circ \pm 4^\circ$). It can be suggested that being an active modality the said hydrokinesio therapy is showing significant patient benefit compared with conventional treatment.