

## **Comparative Efficacy of Selected Physiotherapy Treatment and Yogic Asanas on Low Back Pain among Male Physical Education Students**

**Bindal<sup>1</sup>, V.D. and Ghai<sup>2</sup>, G.D.**

<sup>1</sup>Deptt. of Health Sciences & Yoga, Lakshmi Bai National Institute of Physical Education (Deemed University), Gwalior (M.P), India

<sup>2</sup>Deptt. of Physical Education, Lakshmi Bai National Institute of Physical Education (Deemed University), Gwalior (M.P), India

### **Abstract**

Low back pain is very common among general population and sportspersons. The structure of lumbosacral spine is such that predisposes it to mechanical injury. The sportspersons, in particular are subjected to repetitive bending, twisting or compressive stresses to the spine causing low back pain. Purpose of the present study was to see the comparative efficacy of selected physiotherapy treatment and yogic asanas on low back pain among male physical education students. Thirty male students having low back pain were randomly selected and divided into two equal groups; Experimental Group I and Experimental Group II. Experimental Group I was given Physiotherapy treatment, which included Pulsed Short Wave Diathermy and selected flexion and extension regimes of therapeutic exercises for three weeks. Experimental Group II received hot fomentation followed by selected Yogic asanas namely, Bhujangasana, Dhanurasana, Pavanmuktasana, Paschimottasana and Shavasana. The statistical analysis was done to see the significance of difference between the treatments. For this purpose 't' ratio was applied at 0.05 level of significance. Data analysis revealed that in both Experimental Groups I and II, low back pain reduced significantly. However, no significant difference was found between the groups (i.e., physiotherapy treatment and yogic asanas).

**Key Words: Physiotherapy, Yogic asanas, Pulsed Short Wave Diathermy, Low Back Pain**

### **Introduction**

Low back pain is so common that according to an estimate about 60-80% of the people experience low back pain sometime during their lifetime. The structure of lumbosacral spine is such that predisposes it to mechanical injury causing low back pain. Any movement or series of movements, which places abnormal stress or abnormal loading on the spine, can injure it. This may be a sudden overload or a cumulative overload. Various studies have confirmed that lower back problems are second only to foot problems in order of incidence to humans throughout their lives. It is a common complaint among the overall population and athletes. Low back pain is

more common among the sportsmen as they are subjected to repetitive bending, twisting or compressive loading stresses to the spine. In athletes, reported incidence rates of lumbar pain vary between 7% and 27% (*Spencer & Jackson, 1983 and Varlotta & Birnbaum, 1995*).

Although low back pain is very common, however the exact cause of low back pain cannot be identified in 80% to 90% of the patients. An exact diagnosis cannot be made due to a loose association among symptoms, physical examination and anatomical findings. Low back pain is most often due to an incompetence of the soft tissue structure, and the onset of pain is believed to be caused by a mechanical