Short Communication

Role of Music on Muscle Recruitment

Ramasubramania Raja, N.A. and Arumugam, N.

Sardar Bhagwan Singh Post Graduate Institute of Bio Medical Sciences & Research, Balawala, Dehradun

Abstract

The study was conducted to register the occurrence of Bioccipital/ Rotator Cuff Tendonitis in the subjects involved in Bench Press Activity in gymnasium**.** Fifty male subjects (age group 20-30 years), having shoulder pain for at least three weeks, were selected randomly and were interviewed for the present history of shoulder pain, from various gymnasia. The subjects were interviewed through a questionnaire and assessed using standard orthopedic examination techniques. The value of Z (3.68) >3 showed a definite relationship between subjects doing Bench Press activity in gymnasium and occurrence of Bioccipital / Rotator Cuff tendonitis. This study gave preliminary data on the incidence of tendonitis in subjects who train with weights. Occurrence of these shoulder injuries can be prevented by a proper knowledge of the technique, supervision and knowledge about the mass of poundage lifted.

Key Words: Hawkin's Test, Isometric Abduction, Isometric External Rotation, Injury

Introduction

Physical activities have major role in the human beings, these activities can vary depends upon the physiological and psychological functions. The activities if done while listening to music can alter the physiological and psychological functions, because music affects the physiological and psychological actions and may even are music specific. *Sears in 1957* observed that muscle tension can be altered by music: who reported that stimulating music increased muscle tension while sedative music decreased muscle tension. *Pearce (1981)* revealed the effects of different types of music on physical strength. *Johnson et al (2002)* conducted a study that demonstrated some positive responses to familiar music as an external stimuli that facilitated adherence to a physical rehabilitation exercise program with persons who were elderly.

According to *Chipman (1966)* music accompaniment improved muscular endurance in the performance of junior high students doing sit-ups. *Copeland & Franks (1991)* observed that soft music as compared to loud fast music increased walking/jogging on a treadmill time at sub maximal intensity. A review of studies by *Dainow, (1977)* indicates that heart rate tends to only moderately follow the music; increasing in response to fast music and decreasing in response to slow music. The study was conducted with the following specific aims:

- To find out the effects of music on muscle recruitment
- To compare the effectiveness between Stimulative music, sedative music and music silence on various neuromuscular part.

Materials and Methods