

NERVE CONDUCTION STUDY OF LOWER EXTREMITIES IN FOOTBALL PLAYERS

ABSTRACT

BACKGROUND:

Football is a sport of high contact in which injuries are common. Lower limb nerves are exposed to mechanical injuries in football players. This study focusses on the effects of playing football on the lower limb nerves.

AIM:

The aim of the study is to measure and compare the nerve conduction parameters of male footballers and controls.

METHODOLOGY:

50 male football players, 18-30 years of age who played football for 3 days a week continuously for a period of 5 years were chosen from football clubs in and around Coimbatore. 50 controls who were not indulged in active sports involving lower limbs were chosen. Motor nerve conduction studies were done using RMS-EMG-EP MARK II equipment. The results were tabulated and analysed using SPSS software version 24.

RESULTS:

The motor nerve conduction velocities and f-wave responses of tibial and common peroneal nerves of both legs were delayed in footballers when compared to controls and were found to be significant (P value < 0.05). The anthropometric measurements did not influence the nerve conduction parameters.

CONCLUSION:

The prolonged playing of endurance sports like football caused delay in nerve conduction parameters, which may be due to nerve entrapment causing sub-clinical neuropathies.

Key words: footballers, tibial nerve, common peroneal nerve, nerve conduction velocity, f-wave response.