

SUMMARY & CONCLUSION

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Our study was carried out on 100 athletes of both sexes, representing four different sports, football (30 players), weight lifting (25 layers), tennis (20 players) and volleyball (25 players). A control group of 100 persons of general population, age and sex matched to the study group was also studied.

The aim of this study was :-

- (1) Determination of the incidence of low back pain in athletes of Various sports.
- (2) Identification of the common causes and risk factors of back pain these athletes.
- (3) Examination and reporting the radiological changes in plain X ray occurring in this group of patients.

Each player presenting with low back pain was subjected to :-

- (1) Full history taking
- (2) Thorough clinical examination
- (3) Radiological examination of the dorsolumbar spine from T₁₁ to L₅ by both anteroposterior and Lateral views.

Vertebral deformities were defined for each vertebra as follow:-

$$\text{Wedge} = ((hp - ha) / hp) \times 100$$

$$\text{Biconcavity} = ((hp - hm) / hp) \times 100$$

$$\text{Compression} = ((hp' - hp) / hp') \times 100$$

hp : Posterior height

hm : mid height

ha : anterior height

hp' : Posterior height of the vertebra above or below

(Eastell et al., 1991).

The prevalence of low back pain in the study group was 40%, and it was higher than its prevalence in the control group (23%). In weight lifting and tennis the incidences of LBP were 60% and 45% respectively and both were significantly higher than other sports and the control group. ($P < 0.05$) in both sports.

The incidence of LBP in football and volley ball were 30% and 28% respectively with no significant as compared to the control group ($P > 0.05$).

As regard the causes of LBP, there was a "significant difference for disc prolapse and spondylolisthesis between the study and control groups ($P < 0.05$), while there was no significant difference for back muscle strains and Ligamentous sprains ($P > 0.05$).

Radiological changes showed a significant loss of lordosis, fracture in pars interarticularis and spondylolisthesis in the study group ($P < 0.05$).