

Microscopic features of intervertebral discs removed at surgery in a sample of Sri Lankan population.

A,L Karunanayake

Department of Anatomy. Faculty of Medicine. University of Kelaniya.

A. Pathmeswaran

Department of Community Medicine, Faculty of Medicine. University of Kelaniya.

M.B.S Seneviratne

Faculty of Medical Sciences, University of Sri Jayawardenapura.

H.R.R Fernando

National Hospital Sri Lanka.

ABSTRACT

Introduction : Disc degeneration is an important cause of low backache.

Objective : To describe the microscopic features of surgically removed intervertebral discs.

Method : A piece of annulus fibrosus from the posterior lateral region of the disc was collected at the time of surgery from patients with prolapsed discs. They were preserved in 10% formol saline and later Hematoxylin and Eosin stained slides were prepared and examined under a light microscope. The features of the cartilage cells (shape and distribution) and the vascularity of the annulus fibrosus were studied.

Results : Fifty-two discs were studied. Fifteen were from females and thirty-seven were from males. Age range 22-62 years. Median age 40 years.

There were cartilage cells of oval and spherical shapes in all the discs studied. Out of these two cell types spherical shape cells showed a slight predominance. Most of the cartilage cells were found in isolation but there were cells in a group surrounded by a capsule. All specimens showed evidence of blood vessels. There were inflammatory cells close to the blood vessels.

Conclusion : The microscopic features of discs found in this study were similar to those reported in previous studies.