

# MORPHOMETRIC RESEARCH OF TRABECULAR BONE LV VERTEBRA

V Środkowo Europejski Kongres Osteoporozy i Osteoartrozy oraz XVII Zjazd Polskiego Towarzystwa Osteoartrologii i Polskiej Fundacji Osteoporozy, Kraków 29.09-1.10.2011

## Streszczenia:

Ortopedia Traumatologia Rehabilitacja 2011, vol 13 (Suppl. 1).  
str 146

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**Keywords:** *lumbar vertebra, morphometry*

**Aim.** To study morphometric characteristics of spongy bone of lumbar vertebrae.

**Materials and methods.** 102 human preparations of LV vertebra were used in the work. We took samples of spongy bone in the following areas: supero-anterior, supero-inferior, postero-superior, postero-inferior, lateral and central zones of the vertebral body. Then, every blocks were photographed in various projections using Videopresenter Svp-5500. Next, we

determined the classical morphometric characteristics of trabeculae of samples by using the Morpholog program. The data were processed using methods of variation statistics.

**Results.** Every area of the body LV vertebra has inherent features of architectonics. Anterior zones are particularly different because they contain a group of inclined trabeculae (lamellae) in the form of a wedge. During the research of sizes of trabecule, we found the average length of the vertical and horizontal trabeculae  $1328,5 \pm 112,5$  mm and  $1053,7 \pm 97,5$  microns.

**Conclusions.** Trabeculae of different areas of the body of the fifth lumbar vertebrae have different morphometric parameters. Wedge of trabeculae, located in front of the body, is particularly interesting. These features are determined by various functional loads.