

were highly reproducible. Furthermore, we expressed each intervertebral space as a percentage of its adjacent space, introducing the coefficient  $\alpha$  factor for every intervertebral space.

**Conclusions.** The results suggest that a normal values' database to refer to during preoperative planning of correction of a degenerated intervertebral disc, is feasible. Our study offers new anatomical and radiological insight in terms of spinal measurements and their potential correlation with current surgical techniques. A new approach for calculating disc space as an expression of its adjacent disc has been introduced, with various potential applications.

#### EXPRESSION OF THE O-LINKED N-ACETYLGLUCOSAMINE CONTAINING EPIPOPE H (O-GLCNACH) IN BENIGN PROSTATE HYPERPLASIA (BPH)

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**Background.** Epitope H contains an O-linked N-Acetylglucosamine residue (O-GlcNAcH) in a specific conformation and/or environment recognized by the site specific mouse monoclonal IgM antibody H (mabH). Epitope H is present in several types of cells and in several polypeptides including keratin 8 and vimentin in the latter in cells under stress. The post-translational modification of the hydroxyl groups of serine and threonine residues of polypeptides by the addition of the sugar moiety N-Acetylglucosamine occurs in many proteins, which are engaged in cell processes such as transcription, translation, protein compartmentalization, proteasomal degradation, which influence cell division, differentiation, development, apoptosis, resistance to stress, and are involved in major diseases such as cancer.

**Aim.** In the present work we examined the expression of the O-GlcNAcH in the cells of fifty cases of BPH.

**Material and Methods.** Indirect immunoperoxidase using the mabH. **RESULTS:** A) The luminal epithelial cells of the acini showed low expression of the epitope as the great majority of the cells remained unstained. The minority of stained cells showed the following patterns: Stained coarse gran-

ules in the cytoplasm and/or diffuse stain of the lateral, apical and subnuclear cytoplasmic regions. B) The basal acini cells showed low expression with the minority of stained cells with diffuse cytoplasmic stain. C) Practically all smooth muscle cells showed strong diffuse cytoplasmic stain. D) The inactive fibrocytes remained unstained.

**Conclusions.** The (O-GlcNAcH) is expressed in a different pattern among the cellular elements of BPH. The (O-GlcNAcH) expression in the luminal epithelial cells of the acini can be served as a base reference in order to compare the (O-GlcNAcH) expression of prostatic carcinoma cells in future studies.

#### THE INCIDENCE OF ANATOMICAL VARIANTS OF THE BRACHIAL ARTERY

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**Background.** Nowadays the individual anatomical variability is studied using various classical and modern methods that have become a contemporary direction of morphology.

**Aim.** The purpose of our study was to highlight the anatomical variants of the brachial artery.

**Material and Methods.** The brachial artery and its branches were studied on 60 samples (34 angiographs and 26 cadaveric upper limbs). The anatomical dissection marked out: the origin, trajectory, variants and relations of the brachial artery with the neighboring anatomical elements. Anatomical variants were highlighted on 25 upper limbs (UL): 16-male UL (9 right and 7 left) and 9 female UL (6 right and 3 left).

**Results and Discussion.** A single arterial variant was detected in 6 male UL (4 left and 2 right), and multiple arterial variants — on 19 UL: 10 male UL (6 right and 4 left) and 9 female UL (6 right and 3 left). Bilateral variants were found in 8 cases (5 male and 3 female) and unilateral — in 9 cases: 6 male UL (4 right and 2 left) and 3 female UL (2 right and 1 left). The highest number of numerical variations have been marked out in 13 cases; the variants of origin and trajectory — in 11 cases; various common arterial trunks — in 8 cases.

**Conclusions.** A wide range of variants is characteristic of the brachial artery and the knowledge of those variations is of clinical significance.