

HISTOCHEMICAL EVALUATION OF HUMAN PROSTATIC TISSUES WITH ISOFORMS FROM CRATYLIA MOLLIS SEED LECTIN AS MARKERS

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Lectins, ubiquitous proteins in nature, with ability to recognize carbohydrates, have been used in histochemistry to evaluate changes in composition and expression of cell-surface as well as cytoplasm oligosaccharides in processes of cellular development and differentiation. In the present study we evaluated isoforms from *Cratylia mollis* seed lectin (Cramoll 1,4 glucose/mannose-specific and Cramoll 3 galactose-specific), conjugated to horseradish peroxidase, as potential histochemical markers for normal and neoplastic tissues of human prostate. Cramoll 1,4 (15 µg/mL) stained weakly and heterogeneously the cytoplasm of normal cell. However for benign prostatic hyperplasia (BPH) and prostatic carcinoma (PCA) staining was stronger and homogeneous than that observed in normal tissue. Cramoll 1,4 stained mainly the apical cellular membrane of hyperplastic cells, while the neoplastic ones presented only a cytoplasmic staining. Stroma showed a weak staining pattern in normal and neoplastic tissues and a moderate pattern in BPH. Cramoll 3 (45 µg/mL) failed to recognize normal tissue. BPH and PCA were not differentially stained showing a weak and heterogeneous pattern, even using a higher lectin concentration. Cramoll 1,4 could be an auxiliary tool in histochemistry contributing to the identification of biochemical changes in cell glycoconjugate profiles and in differential diagnosis between BPH and PCA.

Supported by: CNPq, FACEPE and CAPES.

Key words: *Cratylia mollis*, carbohydrates, lectin histochemistry, prostate.