ADVANCES IN PATHOMORPHOLOGY TECHNIQUES – LECTURES

COMPARISON OF SPECIAL STAINING METHODS – LIVER CYLINDER STAINING BY THE ROUTINE TECHNIQUE AND BIO OPTICA KIT

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Hematoxylin-eosin (HE) is the standard method of staining histologic tissues intended for representation of the basic cellular structures. Other structural elements of the cell are aimed to be represented with special staining methods, those elements that are of special interest to histopathologic analysis. In the present study, the routine methods of staining and ready-to-use commercial kits by Bio Optica were compared on the same tissue material. The liver cylinder tissue obtained by the standard method of needle biopsy was used in the study. The tissue was fixed in 10% solution of buffered formalin, processed with paraffin technique and stained by the standard HE method, Trichrome Mallory method, Orcein, modified Fouchet van Gieson method, and ready-to-use Bio Optica kit for the same methods, according to the manufacturer's instructions. Differentiation of tissue structures when stained by the above methods, the time needed for the method performance, technique sensitivity and cost effectiveness were compared. There was no essential difference when representing the liver cylinder tissue structures. The usage of kits made the making of preparation easier. The simplicity was evident in reducing the time needed for making the preparation and the method did not require special control of the solution concentration since the concentration needed was included in the ready-touse kit.