

Comment on “Comparison of tru-cut biopsy and fine-needle aspiration cytology in an experimental alcoholic liver disease model”

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Diseases of the liver are roughly divided into benign and malignant, as are many organ diseases. In addition to inflammatory conditions and congenital diseases, benign lesions include toxic conditions caused by many factors due to the obvious metabolic functions of the liver, while malignant lesions include primary and metastatic liver tumors. While biochemical and/or microbiological tests and imaging methods can guide the diagnostic approach in liver diseases, histological evaluation is often used to effectively assess the extent of damage to the liver or to obtain a definitive diagnosis¹.

Samples taken for histological evaluation are at the tissue level, and cytological examinations are generally used in the diagnosis of space-occupying lesions, mostly neoplasms². Buscarini et al.³ reported that the diagnostic accuracy was significantly higher in the 2091 cytological examinations that they evaluated retrospectively in the space-occupying lesion of the liver and that the difference between histological examination and cytological examination was not statistically significant. The significance of cytological examination in diseases of the liver other than space-occupying lesions has not been clearly demonstrated, except for experimental studies⁴.

Biopsies performed for histological examination of the liver cause complications, including pain, bleeding, peritonitis, pneumothorax, and even death⁵. Studies specifying the diagnostic accuracy, positive predictive value, negative predictive value, sensitivity, and specificity of cytological examinations in many liver diseases, especially viral hepatitis, alcoholic liver disease, non-alcoholic fatty liver disease, toxic and metabolic liver diseases, are required. It is thought that cytological examinations can be used in the diagnosis and follow-up of the relevant disease if they are found to be appropriate and competent.

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