MALIGNANT CELLS REVEALED IN FINE NEEDLE PUNCTURES OF LYMPH NODES AND TUMOURS
BY ELECTRONMICROSCOPICAL METHODS

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SUMMARY
Cytological, immunohistochemical and electron microscopic observation of 21 percutaneous fine needle punctures of retroperitoneal, pelvic and abdominal lymph nodes after borderline lymphography and computer tomography and 6 punctures of tumours after tomography allowed classification of primary metastases from the small pelvis in 14 patients and characterized tumours in 4 patients, which could not be demarcated by sonography.

We distinguished yolk sarcoma metastasis, prostate gland cancer metastasis, three cases of nodular metastases of seminoma cells, and two metastases of melanoma. Malignant cells of Hodgkin’s lymphogranuloma and non-Hodgkin’s lymphoma were distinguished in seven samples of fine needle puncture. We found malignant cells of adenocarcinoma, T-immunoblastoma, pancreas carcinoma and histiocytosis X in four punctures of tumours.

Fine needle puncture processed for electron microscopy with buffered fixation and harvested into Lowicryl K4M resin through centrifugation makes it possible to detect even the minimum of cells present, preserves the structure of cells and enables to correlate cytological findings in semithick sections with correspond ultrastructure in followed series of semithin sections.

Key words: electron microscopy, nodular metastases, percutaneous fine needle puncture, semithick and semithin sections, seminoma, yolk sarcoma, melanoma, cystadenocarcinoma, lymphoma, Hodgkin’s lymphogranuloma malignant cells

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