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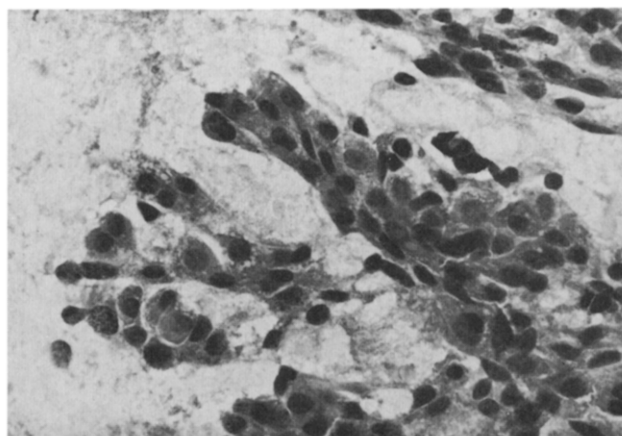
## Late Onset of Gallbladder Carcinoma with Meningeal Carcinomatosis

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GALLBLADDER CARCINOMA is rare, chiefly a disease of older people and associated in nearly all cases with cholelithiasis. The most common findings at presentation are pain, nausea and vomiting, weight loss and jaundice [1]. We report a case with onset of meningeal carcinomatosis.

A 61-year-old woman presented with pain in the muscles of the left thigh and heaviness of the limb. The symptoms worsened despite treatment with diclofenac. During the third week, pain spread over both legs, with mild paresthesias and dysesthesias, and weakness and progressive difficulty in standing and walking. Computed tomography (CT) showed a degenerate L5-S1 without any alteration of intradural content.

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**Fig. 1.** Polimorphous malignant epithelial cells in clusters with pseudoglandular or papillary configuration.

One month after the onset of symptoms she was admitted. Neurological examination revealed upper limb involvement (slight weakness, hypotonia and mild atrophy) and brick tendon reflexes. The lower limbs were very weak with muscular hypotonia and bilateral atrophy. She could not walk or stand. Abdominal and plantar reflexes were absent. Magnetic resonance imaging of the spinal cord demonstrated thickening of the cauda with roundish nodules on the roots' walls. Administration of contrast agent mildly enhanced the nodules and revealed an irregular enhancement at the origin of the cauda and of the distal portion of the dural sac. These findings were either meningeal carcinomatosis or sarcoidosis.

The cerebrospinal fluid contained malignant cells in clusters or isolated with a pleomorphic appearance. The cytoplasm was basophilic and often vacuolated, suggesting epithelial origin. Meningeal carcinomatosis was diagnosed and the primary tumour was looked for. Serum levels of carcinoembryonic antigen and CA199 were greatly increased, which suggested a primary gastrointestinal tract neoplasm. CT revealed thickened gallbladder wall with a mass protruding into the lumen, invasion of the adjacent quadrate lobe of the liver and metastatic nodes in the region posterior to the pancreatic head. Cholelithiasis was present. A biopsy specimen of the hepatic lesion revealed neoplastic epithelial cells with cytological features related to primary biliary tract adenocarcinoma (Fig. 1). Cachexia rapidly ensued and the patient died 33 days after admission. No chemotherapy had been attempted.

Involvement of leptomeninges in solid tumours is rare and may be the first evidence of disease. In a Mayo Clinic series [2] the most frequent primary sites of malignancy were the breast and the lung. In 2 out of 29 cases of the same series, diagnosis of primary tumour was not established. In our patient, neurological symptoms were the first evidence of disease, while presentation of gallbladder tumour is usually related to local spreading (e.g. biliary tract obstruction, pain). Gallbladder carcinoma should be taken into account while looking for a primary tumour in patients with meningeal carcinomatosis.

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