

Fig. 1—A, Transverse sonogram 12 cm above umbilicus. Anechoic tumor (T) surrounding liver (L) mimicking ascites. No acoustic enhancement. A = aorta. B, Sagittal scan 6 cm to right of midline. Diffusely encasing tumor. K = right kidney. C, Sagittal midline sonogram through pelvis and lower abdomen. Hypoechoic tumor mass (T) within pelvis and along anterior abdominal wall. Three strongly echogenic foci (G) in pelvic tumor are bowel gas. B = Bladder. D, Transverse CT scan 13 cm above umbilicus after ingestion of gastrograffin. Low density tumor mass (T) (+14 CT units) surrounds liver (L) (+24 CT units). E, Transverse CT scan 13 cm below umbilicus demonstrates tumor mass in pelvis between rectum (R) and bladder (B). Tumor density = +14 units. F, 72 hr anterior gallium scan. Striking uptake in tumor mass surrounding liver, spleen, along lateral abdominal walls, and in pelvis.

appearance of papillary adenocarcinoma [9]. Adenocarcinoma can be differentiated from mesothelioma by special staining techniques with mucicarmine and alcian blue [10].

Gallium uptake within pleural mesothelioma has been reported by Wolk [11]. Ours is the first reported case of gallium uptake within a peritoneal mesothelioma. The pattern of uptake is similar in some respects to that seen in diffuse peritoneal inflammatory disease [12]. In both cases there is diffuse uptake of gallium within the peritoneal cavity.

The sonographic appearance of peritoneal mesothelioma has been previously reported as an echogenic mass within the greater omentum separated from underlying bowel loops by ascitic fluid [13]. In our case the tumor showed an acoustically homogenous anechoic pattern and the distribution around the liver mimicked ascitic fluid [14]. Certain lymphomas, sarcomas, and adenocarcinomas may be manifested as hypoechoic or anechoic masses [15]. Occasionally, a solid anechoic mass may exhibit prominent acoustic

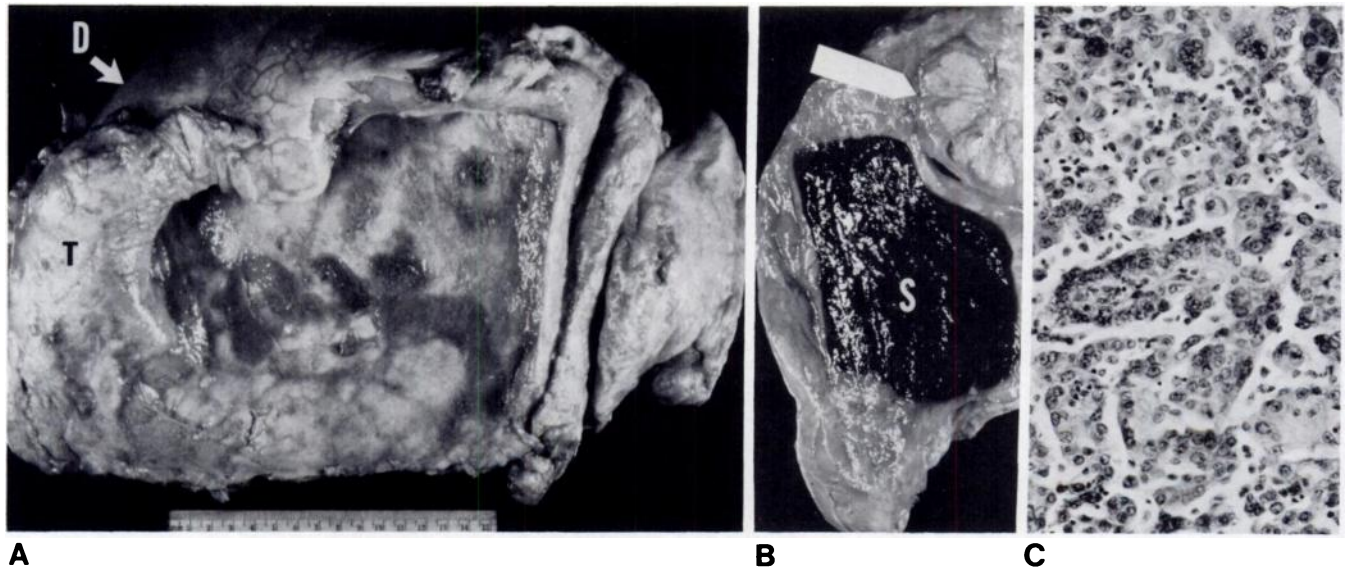


Fig. 2.—**A**, Gross pathology of right upper abdomen with liver removed. Tumor (T) lines inner wall of abdomen. D = diaphragm. **B**, Gross pathology of spleen (S) encased by tumor mass. More discrete tumor nodule (marker). **C**, Histology of tumor. Papillary pattern of malignant mesothelioma. ($\times 250$, original magnification)

enhancement which makes it difficult to differentiate it from a cystic lesion [16]. However, if acoustic enhancement is lacking, as in our case, then the solid nature of the mass may be suggested [16].

Yeh and Wolf [17] have suggested that the higher CT density values of anechoic solid masses may assist in determining their solid nature. The tumor in our case measured +14 CT units which is considerably higher than water density (0 units) and suggested the presence of either high density ascitic fluid or diffuse low density solid tumor. The CT density of ascitic fluid may vary according to its protein content [18].

The treatment of diffuse peritoneal mesothelioma has consisted of various combinations of chemotherapy and irradiation with consistently poor results. Almost all patients die within 2 years of diagnosis [19]. Rogoff et al. [20] reported three patients who survived 9 or more years after intraperitoneal injection of ^{32}P and total abdominal irradiation.

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