

two decades of life are indicated. The pathological and clinical factors responsible for the poor prognosis are discussed. Awareness of the possibility of cancer of the colon in the differential diagnosis of vague abdominal pain in children is stressed. This awareness should lead to the appropriate investigation and early diagnosis, which may lead to successful surgical therapy.

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Peliosis Hepatis

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PELIOSIS hepatitis is a rare condition of no determined clinical significance incidentally found at autopsy; nevertheless, it represents an interesting lesion of unknown etiology and obscure pathogenesis.

The patient was a 53-year-old single white female who was in good health until 14 months before her death when she was hospitalized because of psychosis and abnormal behaviour. On physical examination, a large mass was palpable in the left lower abdomen. The patient's mental condition was felt to be due to an organic brain lesion. She was transferred to the neurological institution, where a tumour was removed from the left frontal lobe of the brain. This was diagnosed as metastatic carcinoma originating in the kidney. The postoperative course was complicated by phlebitis of leg veins associated with pulmonary infarct. At that time, the liver was not enlarged. Psychotic symptoms disappeared. Further examination revealed the tumour in the abdomen to be inoperable. A few months later, she again developed phlebitis and recovered. Six months before her death, a necrotic metastatic tumour was removed from the vagina. At this time, the liver was noted to be enlarged, soft and tender. Two months before death, she again was admitted to the hospital, emaciated, with shortness of breath, pain and discomfort in the distended abdomen. On radiographic examination large metastatic tumour masses were present in the lungs. Large lymph nodes were palpable in the left axilla. The patient's condition deteriorated rapidly.

Postmortem examination revealed widespread carcinoma involving both lungs and pleurae, mediastinal and axillary lymph nodes, brain, right atrium of the heart and the vagina. The left kidney was replaced by a large lobulated tumour mass, meas-

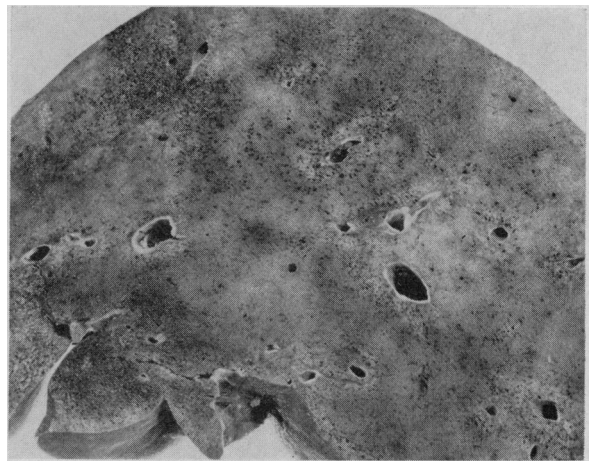


Fig. 1.—Cut surface of liver after fixation. Numerous blood-filled spaces are scattered irregularly throughout the parenchyma.

uring 50 cm. in its greatest diameter. It appeared to be a primary carcinoma of the kidney, and this diagnosis was confirmed by microscopic examination.

The liver weighed 3200 g. It was markedly congested and softer than normal. On the cut surface, it showed numerous tiny dark red spaces filled with blood, irregularly scattered throughout the parenchyma. No metastases were found in the liver (Fig. 1).

On microscopic examination, the dark red spaces seen on gross inspection corresponded to irregularly distributed cavities of various sizes and shapes. They contained blood. No linings were identified. The cavities were mostly localized at the periphery of the lobules, but no constant relation to the architectural pattern of the liver could be established. Smaller spaces, however, showed occasional communication with the sinusoids. No thrombosis was found in the cavities. No evidence of focal necrosis or inflammatory reaction was found in the liver parenchyma. There was no bile stasis (Fig. 2).

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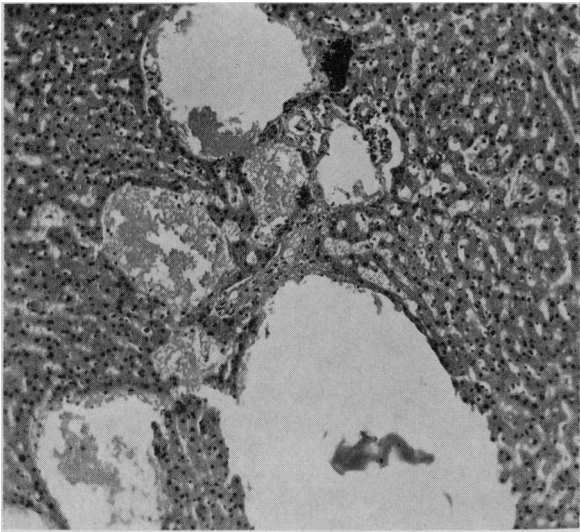


Fig. 2.—Blood-filled spaces at the periphery of the lobules.

COMMENT

Zak in 1950⁷ described this condition for the first time in the English literature and extensively reviewed all hypotheses concerning its etiology and pathogenesis. These can be summarized as follows: (1) congenital malformation, (2) vascular varicosities, (3) rupture of blood vessels, and (4) focal hepatic necrosis with subsequent hemorrhage. No conclusive evidence has as yet been presented to validate any of these theories.

The majority of cases of peliosis hepatis were reported in association with wasting diseases, predominantly tuberculosis and neoplastic disease.^{1, 3, 4, 6}

This condition was also found in association with the administration of norethandrolone and testosterone.^{2, 5} In these cases, in addition, there was marked cholestasis which was absent in those not receiving anabolic hormones.

Yanoff and Rawson⁵ divided peliosis hepatis into two morphologic types, the parenchymal and the phlebotic type. In the parenchymal type, the cavities were irregular with no lining, and there was no constant relation to the anatomic structures of the liver. The cavities communi-

cated with sinusoids, and focal parenchymal necroses were found. Except for absence of hepatic necrosis, the present case could be classified as this type. In the phlebotic type, on the other hand, the cavities were reported to be regular, lined with endothelial or fibrous lining and centrilobular in distribution. They communicated with sinusoids or central veins; this relationship was demonstrated by an elaborate technique of serial sections and tri-dimensional reconstruction.⁵

The pathogenesis of the lesion remains obscure. It is considered that the initiating process is that of focal parenchymal necrosis⁷ which later may undergo sclerosis or hemorrhagic transformation with formation of a permanent cavity. This mechanism can be applied to the parenchymal type of peliosis hepatis. In the case presented, however, there was no evidence of scarring or inflammation in the proximity of the cavities or elsewhere in the parenchyma. There was no suggestion of previous or present necrosis. It is, therefore, difficult to accept focal parenchymal necrosis as a major factor in the pathogenesis of this condition. Dilatation and/or rupture of vascular channels and extravasation of blood could possibly offer a better explanation for formation of the cavities. The underlying or precipitating factor remains obscure. In the phlebotic type, the basic mechanism appears to be a progressive dilatation of central veins.^{5, 7} No definite conclusions were reached to explain the pathogenesis of the lesion.

SUMMARY

A case of interesting pathologic finding of peliosis hepatis in association with metastasizing carcinoma of the kidney is reported. Etiology and pathogenesis of the lesion are briefly discussed.

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