CASE REPORT

EMBRYOMA OF THE KIDNEY WITH SYMPTOMS AT BIRTH

BY

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A case of embryoma of the kidney causing symptoms at birth seems to be rare enough to merit reporting.

Many names have been applied to the embryonic renal tumour, including 'Wilm's tumour,' 'mixed tumour,' 'nephroblastoma,' 'adenosarcoma.' This embryonic renal tumour appropriately called also 'nephroblastoma' since it arises from and consists of immature renal blastema.

Symptoms from these tumours usually arise within the first three years of life and rarely after the age of ten. Although renal tumours have been found in foetuses, it is rarely that the tumour is large and able to cause symptoms at birth. Their occurrence is about twice as common in males as in females. The tumours are usually single and unilateral, but multiple or bilateral growths have been reported.

Structure. There is a great structural variety, but usually embryonic renal tissue showing different degrees of differentiation predominates.

Growth and treatment. In a small proportion of cases the tumour is confined to the kidney when first diagnosed and in these cases nephrectomy is said to be curative. Attention is drawn to the condition because of an abdominal swelling or haematuria. Even large tumours with haematuria may be curable by early surgery. However, the tumour tends to be highly malignant and metastases frequently occur in the lungs, and more rarely in liver, bones or elsewhere.

Silver has recently reported a series of eighteen cases of embryoma of the kidney. The youngest patient was three days old. In this case the signs

Fig. 1.—Photomicrograph of embryoma showing well differentiated connective tissue and tubules. ×98.
and symptoms appear to have been similar to those of the case reported below.

Case Report

A male baby was admitted to the hospital one hour after birth. He was full term and weighed 6½ lb. Gross abdominal enlargement was present at birth and for this reason the midwife had had difficulty in delivering the baby. He was said to be bleeding from his penis at birth.

Examination. The baby was jaundiced. The abdomen was distended and tense and there was a firm swelling in the left flank which was dull to percussion. Blood was seen at the urethral orifice which otherwise seemed normal.

A blood count showed the haemoglobin to be 9.9 g. per 100 ml.

Examination of the urine showed large numbers of red cells and an occasional cast.

A radiograph of the abdomen confirmed the presence of a large swelling in the left flank.

A blood transfusion followed by a laparotomy and probably nephrectomy was contemplated, but unfortunately the baby died shortly after admission.

At necropsy the left kidney was found to be replaced by a cystic swelling about the size of a large grapefruit. The left suprarenal was larger than the right and was on top of the tumour and easily detached from it. Section of the tumour showed only a small rim of apparently normal kidney substance, the rest of the mass consisting of neoplasm and blood clot. No metastases were found elsewhere in the body.

Microscopical examination of the tumour showed cellular tissue differentiating into glomeruli, tubules, and non-epithelial tissue, and there were numerous areas of necrosis.

Summary

A case of embryoma of the left kidney which was present at birth is reported. The symptoms were an abdominal mass and haematuria.

Fig. 2.—Photomicrograph showing embryoma tubules and proglomeruli. x320.

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REFERENCES