PAPILLOMA OF THE CHOROID PLEXUS IN AN INFANT

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Friedman and Solomon¹ have recently reviewed the literature relating to papilloma of the choroid plexus and have tabulated in detail the fifteen cases which have been reported in children. The following case record of this rare condition is presented in order to illustrate a cause of hydrocephalus in young children, which is seldom considered in the differential diagnosis.

Clinical record

B. S., a fourteen-month old infant, was admitted to hospital under the care of Dr. Smallwood, eleven weeks before death with the complaint of cough since the age of three months. This became worse after measles at the age of six months. The cough was always worse in the morning and had been increasing in severity. The infant had been born at full term and was normal in development. There was no known contact with tuberculosis.

Physical and x-ray examination revealed a post-pneumonic fibrosis and bronchiectasis. The child slowly lost weight in the hospital but otherwise appeared well, apart from cough. Eight weeks before death the fontanelle was noticed to be full, and later definitely bulging. There was a slowly increasing hydrocephalus. Vomiting became frequent. Lumbar puncture revealed a blood-stained cerebro-spinal fluid. The left arm and leg moved more than the right. The right plantar response was extensor, the left was flexor. Finally both became extensor. The general condition continued to get worse until the child died suddenly, eleven weeks after admission to the hospital.

Examinations of the cerebro-spinal fluid were made frequently. The leucocytes were never increased. The red blood cells varied from 0 to 850 per c.mm., but usually were less than 100. Bio-chemical analysis of the cerebro-spinal fluid revealed normal values for sugar, and protein, with a slightly reduced chloride content, varying from 683 to 685 mgm. per cent. Tubercle bacilli were searched for by direct examination and guinea-pig inoculation, but none were found. The Wassermann reaction was negative. The red blood cells and leucocytes were normal in number and type. A clinical diagnosis of idiopathic hydrocephalus was made.

Post-mortem findings

At post-mortem examination the brain was soft and showed marked internal hydrocephalus, which was equal on the two sides. The choroid plexus in the left lateral ventricle was normal. That on the right side presented a

FIG. 1.—Right ventricle.

FIG. 2.—Left ventricle.

FIG. 3.

FIG. 4.

large, soft, sponge-like mass about the size of a hen's egg, which projected from the posterior horn of the ventricle (see fig. 1 and 2). When floated in water the tumour was extremely soft, velvety and easily compressible. There was no surface lining. Palpation revealed no cystic spaces or calcareous deposits.

Microscopically the mass was composed of long papillae with numerous branches and projecting villi (see fig. 3 and 4). These consisted of typical connective tissue with numerous thin-walled capillaries composing a large part of their structure. The lining epithelium consisted of a single layer of cuboidal cells, which in some parts appeared almost as columnar epithelium. The cells were uniform in size and the round or oval nuclei stained deeply. Numerous vacuoles were present, usually one large vacuole at the fixed end of the cell. The picture was the same in all areas being one of a simple hypertrophy of the choroid plexus, showing no evidence of malignancy, invasion or necrosis.

REFERENCE

1. Friedman, J. J., & Solomon, C. I., *Am. J. Dis. Child.*, Chicago, 1936, LII, 114.