

Neurology. — "*A partial foetus removed from a child.*" By Prof. C. WINKLER.

(Communicated at the meeting of June 30, 1923).

A few months ago a child of nearly three months, was brought in my clinic, having a fluctuating tumour in the neck and a not very intensive internal hydrocephalus.

Apparently it suffered from spina bifida, as the transverse process of the 2d and 3d cervical vertebrae stood far apart and the processus spinosi were missing. The examination of the tumour made it probable that a myelo-cysto-cele might be found in it.

For the rest this healthy child had normal breathing, responded to pin-pricks with mimic facial expressions and spontaneously moved its four extremities.

The tumour, filled up with liquor, was opened by Dr. WALLER. He found in the middle of the fluid a strongly vasculated stalk, nearly 1 c.M. in diameter, connecting the deep tissues in the mid-line with the external wall of the tumour-cyst. After underbinding the stalk in the depth, he removed stalk and cystic tumour. In a week the child recovered. As I saw it again, six weeks after the operation, it appeared to be a rather normal child of circa five months of age.

The removed specimen was given to me.

A section made through the middle of the stalk proved, that it was a spinal cord surrounded by an intensely vasculated membrane (fig. 1a). In this spinal cord the columna posterior had disappeared and the dorsal wall of the central canal was open. The form of the central canal was as this figure shows.



The lateral, the anterior column and the grey matter were easily recognisable. In the lateral column the area of LISSAUER, the spino-cerebellar tracts and the surroundings of the grey substance are myelinised. In the anterior funiculi was seen a strongly marrowed commissura anterior, and the tecto-spinal path has also gained marrow. Both, not medullated, pyramidal tracts are recognisable.

The substantia Rolando is strongly developed. The anterior horns contain atrophic large cells.

From this cord, ventral and dorsal medullated rootlets take origin.

Examining sections through the central end of the stalk (fig. 1*b*), the central canal widens. The lateral part of the medulla disappears and only a ventral rest of nervous tissue remains lined by the

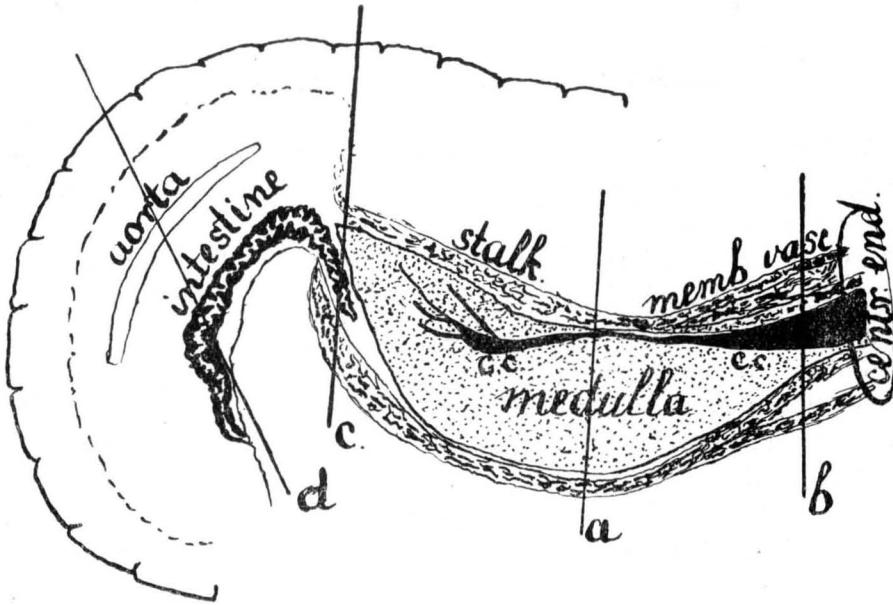


Fig. 1. Wall of the tumor and stalk.

ependyma of the central canal, now irregularly shaped and wound in an irregular way. The membrana vascularis also divides in two membranes, leaving a hole between them.

Examining sections through the stalk, towards its entrance in the skin (fig. 1*c*), the central canal soon closes dorsally. Its shape changes into another form, then it ends into many branches, one of which may be followed, lying excentrically, to the end.

At that moment the nervous tissue is represented by *a*. strongly medullated fibres of the medullar columns *b*. medullated posterior roots with well developed spinal ganglia (fig. 1*c*).

At the moment that the stalk reaches the skin, there is found, ventrally from what seems to me to be the caudal end of the spinal cord, a tube, which soon appears to be the intestinal tube.

Sectioning the wall of the tumour, caudally from the entrance of the stalk, it appears to contain the caudal end of an imperfectly developed, partly atrophied, foetus.

In foto 2 is seen, that cutis and subcutaneous tissue with hair-follicles and sudorific glands is separated from the new tissue by a system of lacunae, filled up with blood and bordered by endo-

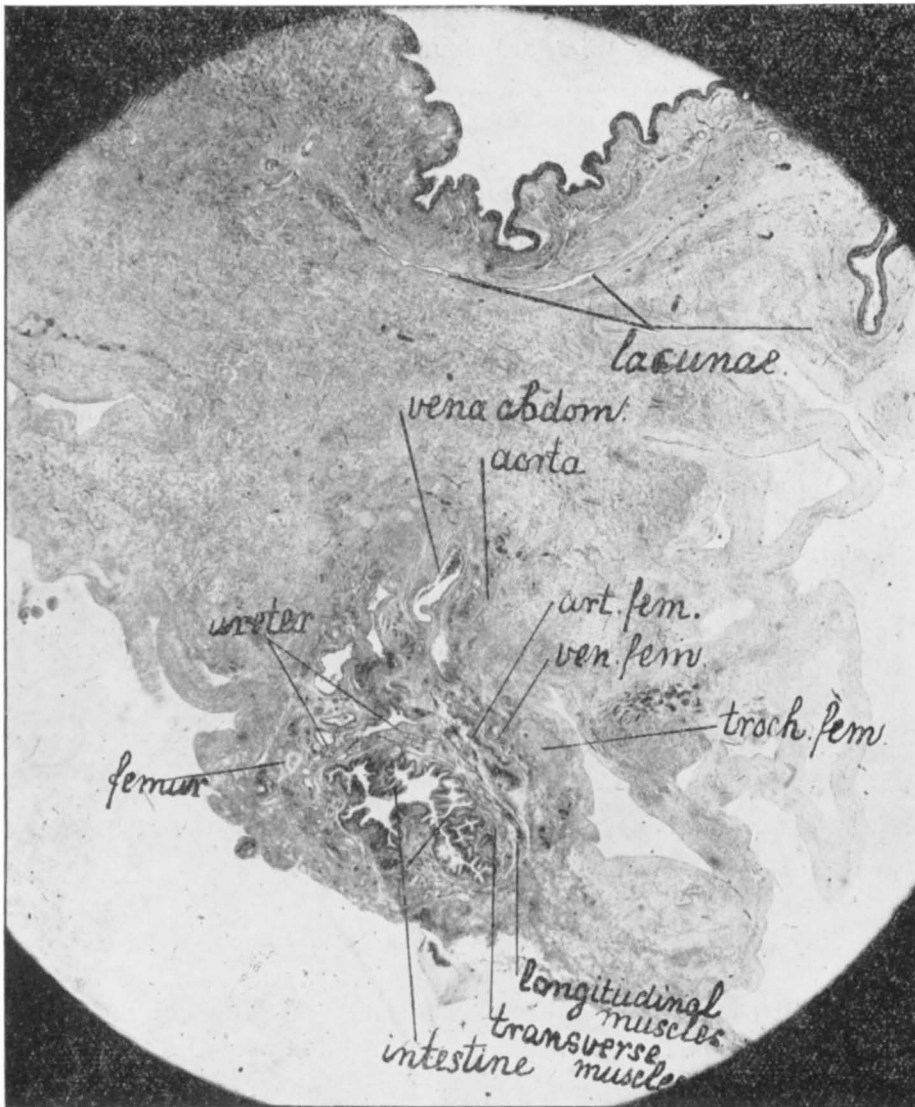


Fig. 2. Foto from a section through the wall of the tumour (see fig. 1d.)

thelium-cells. Most striking however is the deeper part. A transverse section of a tube is found there, whose internal surface is irregularly wound.

It is formed by a single layer of cylindric epithelium, placed upon a membrana basilaris and bordered towards the lumen of the

tube by a transparent band with small transverse lines — a hem of cell-cilia. The loose connecting tissue, building the basilar membrane upon which the epithelium-cells repose, is surrounded by a transversal and by a longitudinal muscle-layer. I consider this tube to be the intestinal tube.

Dorsally from this tube are found the large vessels, aorta and vena abdominalis. In the foto (fig. I *d*) the section touches the left femur; at the right side the trochanter femoris is found. Also both ureters and more caudalward the bladder is seen.

In this way it appears that the wall of the tumour contains the caudal end of an insufficiently developed foetus, connected to the well developed child by a stalk, containing the caudal end of a medulla spinalis.

I presume a double monstrum, a duplicitas posterior is here present. The single head of this monstrum was followed by a double caudal part of the body. The one half of the body developed normally.

The other half atrophied. A relatively well developed medulla remained in the stalk, the caudal end of the foetus was found in the wall of the fluctuating tumour.

Hence this female child carried its atrophied twin-sister at her back. The superfluous atrophic foetus was removed and it is not impossible, that the remaining child may grow up normally.

ERRATUM.

On p. 310 of this volume line 13 from the top to omit the words *and Wolffian Ducts* and to read: by the kidney-tubules (TITSCHACK 1922, a. s. o.).
