

CASE 2

This patient, aged 29, was at the 15th week of her third pregnancy when admitted here on March 31, 1949, having been ill with meningitis for ten days. Her cerebrospinal fluid was clear and showed protein 120 mg.%; cells 147 (all lymphocytes); sugar 30 mg.%; chlorides 703. These findings were accepted as diagnostic of tuberculous meningitis, but the organism was not recognized or recovered on culture. Her pregnancy had apparently been normal, and she weighed 123 lb. (55.79 kg.). Treatment with streptomycin was at the rate of 100 mg. intrathecally daily and 600 mg. intramuscularly 12-hourly. Her meningeal condition responded well and she continued to feel foetal movements, although foetal heart sounds were not heard.

On April 11 she had a blood streptomycin level of 6 μ g. and a cerebrospinal fluid content of 8 μ g. At this stage Mr. H. I. McClure examined her, and considered her pregnancy a normal one of about 16 weeks' duration.

On April 22 her uterus emptied spontaneously, and she admitted that she had missed foetal movements for the previous two days. She was severely shocked, and curettage was carried out by Mr. McClure. Her recovery was uneventful, and she was discharged from hospital on August 4, apparently completely recovered.

Dr. J. E. Morison, of the Institute of Pathology, reported upon the uterine contents as follows. "Foetus and membranes correspond to about 18 weeks' pregnancy. It is possible to exclude by gross examination any congenital malformation of the heart or great vessels. The lungs and brain seem to be developing normally. There is most extensive calcification of the chorionic villi. At this stage the appearances are very unusual: it is not possible to regard them as distinctive or specific and similar, though less extensive changes have been seen in other abortions where no pathology could be demonstrated. The relationship of the changes to the therapy with streptomycin must await further cases or reports from other centres. On the whole, any specific connexion appears unlikely."

Apart from the colleagues mentioned, I am also indebted to Dr. G. F. W. Tinsdale for laboratory records and to Dr. L. V. Reilly for the streptomycin levels and typing of the organisms. Dr. F. G. Grant, of the Royal Maternity Hospital, Belfast, is at present preparing a thesis on this material for his M.R.C.O.G.

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Examination of Young Children with Acute Appendicitis

Acute appendicitis is not a common illness in children under the age of 4. When this diagnosis is suspected in a very young child the examining physician or surgeon is faced with two difficulties. First, the child is not able to give a concise history or accurately to locate its pain. The parent usually states that the child has suddenly become irritable and peevish, refused its food, and perhaps vomited once. There is generally some alteration in bowel habit either in the form of constipation or the occurrence of one rather loose and copious motion followed by constipation. The manifestation of pain is limited in the early stages to irritable crying and fretfulness, with the occasional passage of the child's hand across its abdomen. Fortuitous pressure on the abdomen while the child is being comforted causes more pronounced crying and fretfulness, without the necessary explanation.

The second difficulty is in the adequate physical examination of the abdomen. With the child in the recumbent position and able to see what is intended, any

approach to the abdomen causes such resentment and apprehensive crying that palpation in order to assess localized tenderness or rigidity becomes almost impossible. To wait by the bedside for a more favourable moment does not usually help matters, for the pain of acute appendicitis is constant, and each fresh approach to the abdomen is resisted by the child. This is in sharp contrast with the events in cases of intussusception, in which, the pain being intermittent, it is usually possible by awaiting a favourable moment to carry out a satisfactory palpation of the abdomen in between attacks of colic.

I have been so baffled by this difficulty in palpating the abdomen in several children under the age of 4 who were in fact suffering from acute appendicitis that I have evolved the following method of physical examination in such cases, with results which have so far rendered positive diagnosis possible. I claim no originality for this method, but have found it so useful on occasions that I place it on record in the hope that others who may not have tumbled to it may find it helpful.

METHOD

The child is held by the mother or nurse in the position in which a fretful child is comforted normally—that is, clasped to its mother's breast with its arms and legs embracing its mother.

From behind, the examiner then places the palms of both hands on the anterior-superior iliac spines, with the fingers extended across the child's abdomen in the direction of the umbilicus (see photograph), but no pressure is exerted by these fingers in the first instance. The child usually gives a wriggle of resentment when the hands are first applied, but as no pain is caused and as it cannot see what is happening this resentment soon passes off. The hands are maintained in position until the child is quiet, and then gentle



Photograph showing position in which the child is held.

but increasingly firm pressure is exerted by the extended fingers overlying the *left* iliac fossa. This again causes resentment and irritability, which subsides in a short while. Similar pressure is then exerted in the *right* iliac fossa by the fingers of the other hand while easing the pressure on the left. In positive cases the contrast is striking. Instead of a wriggle of resentment the child gives a sharp cry of pain, and, if the pressure has been applied gradually, local muscular rigidity can be felt before it is masked by the generalized rigidity which results from crying.

It is not always possible to carry out this examination more than once, as the child becomes wise to events. But, carefully done once, the signs are so positive that operation can be confidently recommended on the findings.

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