

A CASE OF TUBERCULOUS PERITONITIS; SPONTANEOUS RECOVERY.

By HENRY F. BELLAMY, M.D.,

LATE ASSISTANT TO THE MEDICAL KLINIK, LAUSANNE.

SPONTANEOUS recovery in cases of advanced abdominal tuberculosis is unhappily a somewhat rare event, so that it seems desirable, not only from a clinical but also from a statistical standpoint, that due record should be made of its occurrence.

In April, 1901, a child, aged eight years, was brought to me with a history of rapidly progressive debility and wasting extending over a period of six months; for more than a fortnight also there had been constant complaint of pain in the region of the umbilicus. With the exception of this pain the child was fairly comfortable during the daytime, but towards evening she developed fever and sweating which gave rise to disturbed or sleepless nights. The family history was significant: two of the mother's sisters and a brother had died from rapid pulmonary tuberculosis and the mother herself was of a pronounced tuberculous type. At the time of my first examination of the child, which took place in the morning, she appeared to be bright and cheerful enough, although she was extremely thin; the eyes had an unnatural brilliancy and there was a hectic spot on both cheeks. Examination of the lungs gave no physical sign of serious lung mischief, although there were deficient expansion and a moderate dry cough. The abdomen was swollen and tense and the superficial veins were well marked, symptoms which, together with the pain, had been the cause of advice being sought. Percussion of the abdomen yielded a tympanitic note everywhere but in the flanks quite posteriorly, where a dull note was elicited; here also I was almost certain that I could detect a fluid thrill. The liver was not enlarged and nothing otherwise abnormal in the abdomen could be detected on palpation. The temperature was two-fifths of a degree below normal and the pulse-rate was 100. I advised that the child should be put to bed pending a visit from me on the same evening. At this visit a grave clinical picture presented itself; the child, with brilliant eyes and pink flush, tossed restlessly in bed; there was a considerable amount of perspiration, the temperature was 103.3°F. , and the pulse was 120. The mother informed me that this had been, more or less, the usual evening condition of the child for the past month and that it was becoming steadily worse. The abdomen was still tumid and the child complained of pain on the slightest movement. There was also, I remember, a vague pain in the left shoulder. No appreciable alteration in the area of dullness in the flanks could be obtained by changing the position of the child, but I convinced myself of the fluid thrill. It was now tolerably plain that the child's ailment was of a tuberculous nature and rapidly progressive in type. I gave the mother a guarded prognosis and ordered the usual anti-tuberculous measures, laying especial stress on rest in the recumbent position, fresh air, sunshine, and careful feeding. Two days later, on my visit, I discovered a yellow discolouration of the skin in the neighbourhood of the umbilicus. This I supposed to be a cutaneous pigmentation described as occurring in cases of abdominal and other forms of tuberculosis. On the following day, however, there were considerable digestive disturbance, light-coloured faeces, and rather high-coloured urine. The pigmentation had now deepened and extended to the rest of the body and was well marked on the conjunctivæ. During the ensuing four days the urine became darker and darker and finally it resembled port wine. The skin was irritable; in fact, the patient displayed every symptom of acute icterus. I ordered mercury with chalk in half-grain doses three times daily, together with a saline aperient mixture. Since no improvement took place in spite of this and other anti-icteric treatment I came to the conclusion that the jaundice was not catarrhal but obstructive, probably due to pressure on the bile-duct by an enlarged mesenteric gland. The most difficult and trying feature in the case at this time lay in the nourishment of the patient. Her appetite, according to the mother's statement, had always been capricious and variable, but now it quite baffled all attempts at rational alimentation. Cod-liver oil and its preparations and the various forms of malt extracts and chemical foods were tried in turn but were absolutely

refused, or when forced upon the child made her sick. With great difficulty she was prevailed upon to take milk and milk puddings thickened with Roborat, a preparation of vegetable albumin which I have seen largely used in German sanatoriums. This was, fortunately, well retained and proved a veritable "sheet anchor." By the middle of June the child was getting no worse and had ceased to lose flesh. The jaundice, although still present, was much less in amount and finally disappeared about three weeks later. At the end of the latter period also the evening temperature never exceeded 100.5° and seldom attained even that height. The patient, who had hitherto occupied a large, airy room facing south, with the window wide open day and night, was now taken downstairs in blankets into the garden and placed, reclining at full length on pillows, in a sheltered corner. The weather was fortunately fine and the change was found to be beneficial both for mind and body. There was now no cough and the breathing had improved. The appetite had steadily improved and with it the body-weight. Soups and meat essences thickened with Roborat were readily taken and digested. Progress continued steadily until the middle of September, when the patient was allowed to sit up and to move her arms freely. The evening temperature had sunk to 99° . Winter was now approaching and I was much exercised in my mind as to how it was to be faced. Fortunately, the opportunity of a voyage to Australia under extremely comfortable circumstances presented itself and I readily gave my consent to its being undertaken. The little patient was carefully transported to a Mediterranean port and thence on board the vessel. No remissions occurred during the voyage and after an absence of eight months she returned in good health and able to follow the usual pursuits of children of her age.

I think the case is interesting as showing that recovery is possible in these cases when the best conditions of life are obtainable and when the patient has not already become too much exhausted by the disease. In this instance the potent factors in bringing the case to its successful termination appear to have been fresh air and careful dieting.

Abbots Langley.

THE RELATION BETWEEN ACETONURIA AND ACIDÆMIA IN CASES OF GASTRIC ULCER.

By F. GOLLA, B.A. OXON.

(From the St. George's Hospital Physiological Laboratory.)

It has long been known that pathological conditions of the alimentary tract bringing about a state of partial inanition are accompanied by excretion of the acetone group of bodies. Czerny¹ and his pupils, in a series of observations on cases of gastro-enteritis in infants, estimated the excretion of β -oxybutyric and diacetic acid by determinations of the ammonia in the urine. In many cases they found as much as 50 per cent. of the total nitrogen excreted as ammonia. Van Noorden² observed acetonuria in cases of typhus fever and dysentery. Magnus Levy³ found that in the acetonuria accompanying cases of gastro-enteritis and chronic duodenal catarrh the nitrogen excreted as ammonia varied from 4 to 17 per cent. of the total nitrogen. Külz obtained similar results in cases of cancer. It may be regarded as beyond doubt that the acetonuria in all such cases arises from metabolic disturbances due to inanition. Gerhardt and Schlesinger⁴ obtained 9 grammes of β -oxybutyric acid from 1.5 litres of urine in the case of a non-diabetic man fed exclusively on meat and fat and a certain amount of acetonuria was recorded in all the observations made by physiologists on fasting men.

That the acetone bodies are formed from fat metabolism and not from proteids as Urmtrand originally taught, was first shown by Geelmuyden,⁵ and the same was found to be

¹ Czerny: Jahrbuch für Kinderheilkunde, Bände xlv., xlv., xlvii., and xlviii.

² Van Noorden: Pathologie des Stoffwechsels.

³ Magnus Levy: Archiv für Experimentelle Pathologie, Band xlv.

⁴ Gerhardt and Schlesinger: Archiv für Experimentelle Pathologie und Pharmacologie, Band xlii.

⁵ Geelmuyden: Zeitschrift für Physiologische Chemie, Band xxiii., 1897.