CASE REPORTS

STREPTOCOCCAL SEPTICÆMIA IN AN INFANT*

MISS A. SENGUPTA, M.B.,
Calcutta

A girl, aged 4 months, was admitted in the Chittaranjan Sishu-Sadan, Calcutta, on the 31st December, 1940, for the following complaints:

Fever 100—101°F since 4 days, breathlessness, red, irregular patches all over the body and extreme restlessness.

Family History.—She was the third of three children, born at full term, breastfed, pregnancy and labour normal. There was one abortion, two other children are healthy.

History of Present Illness.—The baby had a fall, had a slight rise of temperature, and a few red patches were seen on the shoulder.

On Admission.—The baby looked very ill and was extremely restless, screamed on touching. There were irregular, œdematous and erythematous patches on the left side of the face, shoulder, lateral aspect of both arms and thigh, and also on the abdomen. Margins of these patches were red gradually fading towards the centre. The skin over them was hard and thickened and tender. The feel simulated that of sclerœdema.

The baby weighed 11 lbs. 4 oz. and looked well-nourished. Fontanelle open, about two fingers' breadth. Tongue clean and moist. Lungs—a few rales on the left lungs in front, respiration rate 50 per minute. Heart—no adventitious sounds, pulse rate 150 per minute. Abdomen—liver just palpable, spleen not palpable. No tympanites. No tenderness anywhere. Pupils were equal, reacting to light, reflexes normal. No convulsion but the baby looked seriously ill and was in a semi-stuporous condition.

Laboratory Findings—

Urine—Reaction acid, albumen trace, a few micro organisms and epithelial cells.

Stool—On 6-2-41—Yellow semi-solid, alkaline, fair number of pus cells and epithelial cells, no parasite, nor ova.

On 14-2-41—Yellow liquid, alkaline, full of pus cells, no parasite, nor ova. Culture showed *B. Coli* only.

*From the Chittaranjan Sishu-Sadan, Calcutta.
Submitted for publication, March 14, 1941.

Blood examination:

Date	Hæmoglobin	R.B.C.	W.B.C.	Polynuclear	Lymphocytes	Monocytes	Eosinophile
31-12-40	60%	3·7 Mill.	15,900 Platelet 370,000	52%	44%	4%	Nil
5-1-41	52%	3·3 Mill.	18,300 a few myelocytes	68%	32%	Nil	Nil
9-1-41			19,700 a few myelocytes, normoblast	52%	48%	Nil	Nil
19-1-41	46%	2·9 Mill.	14,300	54%	36%	6%	4%
30-1-41	50%	3·4 Mill.	14,300	66%	29%	4%	1%

Culture of pus drained from a vesicle on the abdomen showed *streptococcus hæmolyticus.*

Course and Treatment.—On admission the temperature was 97°F. It rose to 101°F. in the afternoon and on the next two days it dropped to 99°F. and the maximum temperature was 100·4°F. And from the fourth day the temperature was normal. A vesicle was noticed on the erythematous patch on the right side of the abdomen and it developed into an abscess. On aspiration greenish yellow pus was drained out and on culture it showed the growth of *streptococcus hæmolyticus.* The abscess was later incised. For the first two days sulphapyridine (M. & B 693) $\frac{1}{4}$ tablet was given thrice daily and from the third to the sixth day sulphanilamide in the same dose. Slight agranulocytosis was noticed and the drug was stopped. Erythema of the skin disappeared on the third day, the patient looked less toxic and respiration was quiet. Multiple abscesses developed, which gradually healed up in about two weeks' time after being incised. Her diet consisted of cow's milk diluted with equal part of barley water and 3—5% sugar and two ounces of orange juice daily. Later she was breastfed. As the weight did not increase lactic acid milk was prescribed and she was doing well. On the 48th day after admission she suddenly had very acute attack of gastro-enteritis, possibly a ward infection and died on the 56th day.

Comment

In erysepelas "general symptoms such as chills, weakness, restlessness and anorexia precede the characteristic local changes. These changes are accompanied by fever, which appears suddenly. The diagnosis is first established when redness of the skin appears at the site of infection. The skin is at first sharply limited, swollen and shining." (Pfaundler & Schlossmann). But these characteristic signs and symptoms may not be

present in an infant. In fact, the diagnosis of this case presented considerable difficulty at the outset. The little patient was afebrile and exhibited a condition of the skin and subcutaneous tissue, which is very much like that in sclerœdema of infants. Erythematous patches were not well defined, presented rather an irregular appearance which may be commonly mistaken for those in erythema exsudativum multiformes. There was no sign of injury anywhere, which could be possibly thought of as the site of erysipelatous infection in the child. Localisation and formation of an abscess indicated the real nature of the disease and subsequent course was uneventful.

It is extremely unfortunate that the baby after recovering from a serious illness subsequently succumbed to an apparent ward infection. The great importance of protecting children from ward infection should always be remembered and for this purpose aseptic nursing technique must be scrupulously followed. If possible the patients who are convalescing from serious illnesses should be isolated in a separate block and must not be mixed up with new admits. Moreover, should any suspicious gastro-enteritis occur in any children, they must be at once segregated. These steps are essential in the organisation and administration of any children's ward. A common ward infection is gastro-enteritis and the next frequent is influenza. Adult visitors with cold must not be allowed to enter a children's ward and children must never be brought to visit a children's hospital. Outside food is also not allowed. With these steps it may be possible to control to a certain extent the occurrence of ward infection, which is always a great danger to the inmates of a children's ward.