

TETANY

By

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RAMU, male, aged 9 years was admitted in our Primary Health Centre at midnight on February 22, 1965 with complaints of general convulsions and semi-unconsciousness. He was having these symptoms for the last 3 years. His father was an old case of epilepsy and due to misunderstanding of his symptoms, his family did not pay due attention earlier. He was studying in the 2nd standard of a Primary school of the village. It was noted that after joining the school, his condition worsened, and he was compelled to leave the school in mid-session.

On Admission : Ramu was semi-unconscious, debilitated, under-nourished and weak. There was no lock jaw. The feet and hands were congested. The ankles were dorsiflexed and inverted. Toes were flexed and sole concave. There was slight temperature 100°F by axilla. Pulse 130 p.m. Respiration 30 p.m. He was having convulsions every 10 to 15 minutes. Carpopedal spasm was first noticed after 3 hours of the admission. Carpopedal spasm occurs only in tetany and is of a great diagnostic value. There was cataract in right eye, a complication of tetany, which proved the fact that Ramu was having the disease for a long time. Ramu had an attack of Rickets at the age of 2.

Tetany is a disease characterised by painful contractions and twitching of the muscles.

The aetiological factors are :

(a) Hypocalcaemia—This may be due to (1) Parathyroid deficiency and (2) Deficient absorption of calcium. Infantile tetany associated with rickets results from deficient absorption of calcium owing to

lack of Vitamin 'D'.

(b) Alkalosis :—Gastric causes include pyloric stenosis and the administration of large doses of certain alkalis in the treatment of peptic ulcer. It may occur in high intestinal obstruction and nephritis. It may be found in chronic arsenic poisoning. In very hot and humid climates hyperpnoeic tetany may occur.

(c) Potassium Deficiency—This may be due to hyperaldosteronism with a normal serum calcium.

Tetany is also said to occur in syringomyelia or cerebral tumour. It may associate with pregnancy and lactation.

Management

1. Nursing Care—Ramu was nursed on a special bed, prepared for unconscious patient. It is very difficult to nurse the tetany cases, because they are not always semi-unconscious nor are they always conscious. Nobody knows when the patient will get the attack. It is therefore most necessary that the nurse should be at the bedside of the patient so that immediate care can be given as soon as the patient gets the attack.

Care of the back and all bony parts is necessary ; owing to spastic muscles bed sores are liable to occur early. Other routine care should be continued as for serious cases.

Ramu was given a soap-water enema every alternate day to relieve constipation. He was more habituated to get constipation. This was possibly due to abdominal spasm and lack of proper nutrition.

2. Diet—During his stay in the Centre Ramu was given a diet rich in calcium such as eggs, milk and green vegetables. The optimum

daily intake of calcium for a child is 1 gr. and for an adult 0.75 gr. A quart (1.2 lit.) of milk contains 1 gr. of calcium. Ramu was given 1 litre of milk daily, with 2 eggs and fruit juice about 10 oz. daily.

3. Medical Treatment : The control of spasm was the primary urgency for Ramu. So we administered Paraldehyde 5 c.c. six hourly. Injection of calcium gluconate 10 c.c. 10 per cent. diluted in glucose 25 per cent. 25 c.c. was given twice a day for the first 2 days and then once daily for last 5 days. Injection Collodial calcium with Vitamin D and B₁₂ 2 ml. E.O.D. was administered. Two tablets of Osteolin 50,000 international units daily with additional multi-vitamins were given for a week.

Ramu's condition on February 23 was serious. From 6 a.m. to 3 p.m. (23rd Feb.) he got 60 attacks of muscular spasm, enough to threaten the life. But we continued our efforts. It was a very painful scene. His mother and sister stood the whole night near his bed, with tears in their eyes. Nursing plays here double role : one to fulfil the needs of the patient and the other to comfort and to give courage to the relatives.

On the 3rd day, Ramu slept on and off with no convulsions up to 3 p.m. but at about 6 p.m. attacks started $\frac{1}{2}$ hourly, these continued till 11 p.m. On the 4th day Ramu's condition was satisfactory and on the 6th day he was in a cheerful mood ; probably he knew that he will be all right now. He got self-confidence, which is an important thing to fight any ailment. Ramu left the hospital on the 11th day with a happy and smiling face.

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