

Pediatric Grand Rounds
Wednesday, March 2, 1960

██████ was a two year old ██████ male who had an explosive onset of diarrhea quickly followed by vomiting and fever three days before admission. The second day of his illness clear fluids were offered, but mostly these were vomited. Twelve hours before admission the physician prescribed a mixture of 1 teaspoon of salt, 1 teaspoon of baking soda and 2 tablespoons of sugar to a quart of water. This mixture was taken eagerly and retained for the last 12 hours prior to admission.

On admission the child was critically ill, lethargic, had sticky mucous membranes, was pale and had a temperature of 105 degrees.

Within an hour the child went into coma and shock and his temperature reached 108.4 degrees. He responded to heroic antipyretic and antishock measures including plasma and whole blood, and his temperature ranged around 103 degrees the rest of the day. Throughout the rest of that day he had frequent light convulsions. The following day he vomited blood and began to pass some tarry stools which continued for the next three days. The patient was lethargic and had a markedly clouded sensorium. By the fourth day his sensorium showed general clearing, but on the evening of that day he had a generalized convulsion which seemed clinically to be tetany and responded to calcium intravenously. By the 8th day the patient seemed well except for some confusion and had a normal physical examination except that the right pupil was somewhat larger than the left.

Day	Na	K	Cl	CO ₂	BUN
1	160	3.2	127	--	--
2	149	4.9	116	10	21
4	134	5.1	102	17	15

██████ was a 19 month old ██████ female who became acutely ill with vomiting, diarrhea and fever six days before admission. Within 12 hours after the onset of her diarrhea the child had a convulsion, became apneic and required resuscitation. She was admitted to an ██████ Hospital where for the next five days she continued having 15 to 20 watery stools a day and was given boiled skimmed milk or Lytren, 1 teaspoon to four ounces of water by mouth and also received two clyses of physiological saline. On the 6th day the child became semi-comatose and was referred to ██████

On admission the child was critically ill, comatose, showed dry mucous membranes, fair skinned turgor, had tachycardia, stiff neck and opisthotonus and a temperature of 105 degrees.

During the first two hospital days her temperature ranged between 105 and 103, and she had repeated seizures which were first right sided, subsequently left sided and then generalized. The patient's admission weight was 18 lbs 13 ozs., and she gained to 19 lbs. 12 ozs. by the fourth hospital day.

Day	Na	Cl	CO ₂	CSF. Prot.
1	--	122	19	240 yellow
3	141	102	30	134 yellow

██████ was a six months old infant who only three days before her second admission had been admitted to ██████ because of diarrhea and vomiting of three days duration. On her first admission she weighed 16 lbs. 6 ozs., had a temperature of 105 and voluminous diarrhea. During that hospital admission parenteral fluids consisting of isotonic saline or isotonic Ringer's lactate were given parenterally, and she received Lytren by mouth throughout her hospital stay but was discharged at 1/2 strength boiled skimmed milk. At discharge on the 4th day her weight was 17 lbs. 5 ozs.

The first two days at home the patient did well and then 12 hours prior to her second admission had an explosive recurrence of her diarrhea with many watery stools. The day of recurrence of her diarrhea she had been changed to boiled skimmed milk which she had taken eagerly.

On admission the patient was described as moderately ill and moderately dehydrated, and it was unknown what her previous weight had been, although her admission weight was 15 lbs. 10 ozs. During the day and evening of admission the child was placed on Lytren and beef broth orally.

Early the following morning the patient was hyperirritable and having "shaking spells" and went into a shock-like state. In the record there is the statement "patient became worse during the night despite taking Lytren and beef broth well".

Because of the evidence of marked hypernatremia the patient was treated with dilute electrolyte solutions, given whole blood, by 48 hours was in relatively good condition, although marked abdominal distention persisted for two days.

During the last few hospital days the patient appeared well, and her weight stabilized at between 18 lbs. and 18 lbs. 2 ozs.

Day	Na	K	Cl	CO ₂	BUN	CSF Prot.	Weight
2 a.m.	204	--	177	--			15 lbs. 8 ozs.
2 p.m.	188	--	170	--	31	340 yellow	
4			125		12		17 lbs. 8 ozs.
9	137		109	25			18 lbs. 2 ozs.

References

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