

## BALANTIDIAL DYSENTERY IN CHILD

### DEATH FOLLOWING RECTAL ADMINISTRATION OF OIL OF CHENOPODIUM

#### Case Report

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We are reporting this case because balantidial infection is rare in Porto Rico, and balantidial dysentery is still rarer. In over 5,000 stool examinations performed at the Ponce Biological Laboratory, we have encountered *Balantidium coli* in only four cases and only one of these individuals showed symptoms of dysentery.

Felícita Negrón, a white Porto Rican female child, six years old, was first seen in my office, November 1st, 1930. The symptoms at that time were: pallor, weakness, breathlessness on exertion, and bloody diarrhea with much mucus. Her mother stated that the child had been getting pale and weak since the bloody diarrhea started in May, 1930. The diarrhea had been constant all these months, having from a minimum of four bowel movements to a maximum of sixteen movements in twenty-four hours. The stool always contained mucus and often macroscopic blood. Physical examination at this time was negative. Temperature: 98.6 F.; pulse standing: 100; weight: 40 pounds; hemoglobin: 55 per cent (Dare); red blood count: 2,900,000; white blood count: 9,000; polymorphonuclears: 50 per cent; lymphocytes: 45 per cent; eosinophiles: 4 per cent; monocytes: 1 per cent. Acromia, anisocromia, polychromatophilia, basophilic stippling. No nucleated red cells; no apparent macrocytosis. In general, no changes suggesting a pernicious type of anemia. Urine: specific gravity, 1.015; acid; sugar, negative; albumin, negative; sediment, no abnormality. Feces: large numbers of *Balantidium coli*. From 15 to 30 per high-power field of the microscope.

The patient was given an antidiarrheic mixture of bismuth subcarbonate, by mouth, and a course of 15 hypodermic injections of emetine hydro-chloride, one-third of a grain each. Liquid diet was instituted during this treatment. At the end of a month the patient showed no improvement and fecal examination revealed about the same number of *Balantidium coli* as previous to treatment.

From December 15th to January 7th, 0.15 grams of Di-hydranol

(N-Oenanthyl-2-4, D-Hydroxy Benzol) was administered thrice daily, with no improvement in symptoms or disappearance of the parasite from the feces.

Having obtained no results from any of the above treatments, we decided to take the patient into the hospital and administer oil of chenopodium rectally, according to Cort's method.<sup>(1)</sup> The patient entered the Ponce District Hospital at 10 A. M., January 19th, 1931. Admission weight: 39 pounds; temperature: 98.4 F.; pulse: 84; respiration: 22; red blood count: 2,750,000; hemoglobin: 52 per cent (Dare); white blood count: 6,300; polymorphonuclears: 53 per cent; lymphocytes: 42 per cent; eosinophiles: 5 per cent. The morphology of the red cells showed changes of secondary anemia. Urine: negative. Feces: macroscopic blood and mucus; microscopically, large number of *Balantidii coli*.

The next day, June 20th, at 2:10 P. M., a large cleansing enema of physiologic saline was administered. At 2:30 P. M., 4 grams of oil of chenopodium in 25 cc. olive oil (Cort suggests 15 cc. of oil of chenopodium in 150 cc. of olive oil for an adult), was administered rectally with the patient in the knee-chest position. At 3:15 P. M. the patient became nauseated and vomited a greenish liquid with white particles. At 3:25 P. M. the patient had another attack of vomiting. Immediately a soap-suds enema was administered with good cleansing effect. At 4:00 P. M. the patient complained of dizziness. At 4:30 P. M. she talked to her mother and appeared normal. At 5:00 P. M. she fell asleep and started to breathe stertorously. From 5:10 to 8:00 P. M., continuous colonic irrigations with physiological saline were instituted until the return flow showed no trace of the odor of oil of chenopodium (20 liters of solution were used). At 6:00 P. M. convulsions started. Twitchings were most marked in the mouth, legs and hands. Eight hundred grams of five per cent glucose solution was administered hypodermically. At 7:00 P. M. respiration became labored, sometimes of the Cheyne-Stokes type. Soon cyanosis became marked. Convulsions became more frequent. Two hundred cc. of 25 per cent glucose solution was now given intravenously. Temperature 98 F.; pulse, 100, rather strong and bounding. The patient died from respiratory failure at 8:18 P. M., never having regained consciousness in spite of repeated hypodermic stimulation with atropine, strychnine and caffeine, as well as oxygen inhalations.

No autopsy could be secured.

#### REFERENCES

- (1) E. C. Cort, (1928). J. A. M. A., 90:1430.