

SCURVY IN A CREE INDIAN

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The following are the findings in a case of frank scurvy in a young Indian woman.

On April 1, 1944, a Cree Indian woman, nursing a three-months' old baby, was admitted to hospital, complaining of inability to eat because of painful gums. She gave her age as 29 years, but looked about ten years older. Her height was 5' 6" and weight 135 pounds. Temperature was 99.3°, pulse 84, and respiration 20. She was pale, weak and short of breath on exertion. She had had several nose bleeds lately. Her breath was foul and was offensive even at a distance. On physical examination no abnormality was found in her chest or abdomen, nor elsewhere except as to her gums and lower extremities. The gums were swollen and of a scarlet colour and each interdental papilla stood out like a sack of blood. They bled at the slightest touch. The tongue was smooth, atrophic and pale, except at the tip, where it was covered with enlarged and reddened papillæ.

The lower extremities showed petechiæ and ecchymoses, ranging from bright red petechiæ to large livid blotches. These were distributed over the legs and lower two-thirds of the thigh. On questioning, she admitted having pain in her legs but not in the thigh. This stoicism is typical of the Indian. She stated that the marks on her legs were caused by striking them on the oven door. However, nowhere was the skin broken. Laboratory findings were as follows: haemoglobin (Sahli) 66%; sedimentation rate 78 mm. in one hour (Westergren); the capillary fragility test was markedly positive; the urinalysis was negative.

On admission she was given 200 mgm. vitamin C intramuscularly, followed by 100 mgm. next day. As it was unlikely that she had a single deficiency, she was given 15,000 units vitamin A, 400 units of vitamin D, 100 mgm. vitamin C, 75 mgm. nicotinamide, 3.3 mgm. riboflavin, 3.3 mgm. thiamine, and 15 gr. ferrous sulphate, all t.i.d. p.c.

The effect of the vitamin C on the gums could be seen within 48 hours. It was as if "the heat had been turned off". Further marked improvement continued during the ensuing week. The condition of the gums showed a steady improvement during the next two months; they shrank steadily and the colour changed from an angry red to the normal pink. The interdental papillæ shrank also and became pointed. No fresh haemorrhages occurred in the legs and the signs of the old haemorrhages faded. The capillary fragility test at the end of one week was no longer positive.

Enquiry into the patient's diet showed that she had been living entirely on "store foods". She had had no potatoes, fish, nor fresh meat all winter, with the exception of an occasional rabbit. During December, January and February she had eaten a few cans of tomatoes, but none after that period. Her diet was essentially white flour, canned meat stew, salt pork, lard, tea, and milk only when taken with tea.

The living habits of any people have an important bearing on their nutritional status. In the past, left to himself, the Cree Indians of Northern Manitoba moved from place to place following the waterways in search of fish, which was his staple diet. He hunted moose and snared rabbits as inclination dictated, or the proximity of game allowed. In summer he ate a fair quantity of