SKIN MANIFESTATIONS OF INTERNAL DISEASE

# REVERSIBLE HYPERPIGMENTATION

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Background: Dermatologic manifestations in vitamin B12 deficiency include skin discolorations, angular stomatitis and hair changes.

Observation: A middle aged Indian gentleman presented with a week's history of non-vertiginous giddiness, gradual onset acral and oral hyperpigmentation with unintentional weight loss. He had 2 episodes of bloodstained oral secretions and no gastrointestinal bleeding. His past medical history included that of diabetes mellitus. There was no alcohol use or history of chronic diarrhoea, abdominal pain. His diet consisted of both red meat and vegetables. Examination revealed conjunctival pallor and hyperpigmentation over the palms and soles, metacarpophalangeal, metatarsophalangeal and interphalangeal joints, and tongue and lips. Heart, lungs, rectal examinations were normal. He was hemodynamically stable. Blood tests showed macrocytic anaemia, with a haemoglobin level of 5.9g/dL and vitamin B12 deficiency. Anti-intrinsic factor and parietal cell antibody were negative. The white cell and platelet count, folate, iron and adrenocorticotropic hormone levels, electrolytes, and short synacthen test were normal. Peripheral blood film showed macrocytosis and anisopoikilocytosis. There was raised lactate dehydrogenase, unconjugated hyperbilirubinemia and low haptoglobin with reticulocytosis. Oesophagosgastroduodenoscopy showed panatrophic gastric mucosa and a 1 cm gastric polyp with histologies of chronic gastritis with intestinal metaplasia and neuroendocrine tumor respectively. Colonoscopy was normal. He was diagnosed with symptomatic macrocytic anemia secondary to Vitamin B12 deficiency from malabsorption due to gastric atrophy with incidental finding of a neuroendocrine tumor. Blood transfusion was given with Vitamin B12 supplementation and follow-up of the neuroendocrine tumor. Within a month, Vitamin B12 levels were normal with weight gain of 3kg, improvement of hyperpigmentation, and 3g/dL increase in post- transfusion hemoglobin levels.

Key Message: Malabsorption is the commonest cause of vitamin B12 deficiency. Hyperpigmentation can mimic Addison's disease. Laboratory findings are indicative of dyserythropoiesis which may be confused with haemolytic anaemia and malignancy. Disease manifestations respond quickly to vitamin B12 therapy.