## Abstract

Gastric neuroendocrine tumors are uncommon tumors of the gastrointestinal tract. There are 4 main subtypes and type 1 and 2 are associated with hypergastrinemia. Vitamin B12 deficiency is mainly caused by autoimmune disease, malabsorption and dietary deficiency. Chronic atrophic gastritis can be caused by autoimmune gastritis and helicobacter pylori and is a cause for hypergastrinemia. We present a case of a 47-year-old female who had been diagnosed to have a gastric neuroendocrine tumor with atrophic gastritis presenting one year later with severe symptomatic anemia, pancytopenia, hemolysis and hyperpigmentation of the buccal mucosa, dorsal and palmar surfaces of the hand due to severe vitamin B12 deficiency. Her pancytopenia completely resolved and hyperpigmentation showed improvement upon replacement of vitamin B12.