

Gastric causes

Simple atrophic gastritis (food cobalamin malabsorption)

Zollinger-Ellison syndrome

Gastric bypass or bariatric surgery

Use of proton pump inhibitors

Intestinal causes

Gluten-induced enteropathy

Severe pancreatitis

HIV infection

Radiotherapy

Graft-versus-host disease

Deficiencies of cobalamin, folate, protein, ?riboflavin, ?nicotinic acid

Therapy with colchicine, para-aminosalicylate, neomycin, slow-release potassium chloride, anticonvulsant drugs, metformin,^a cytotoxic drugs

Alcohol

^aIt is now thought that metformin lowers serum vitamin B₁₂ level by lowering the level of transcobalamin I.

Formerly, the pathogenesis of B₁₂ malabsorption was distinguishable based on the results of a Schilling test in which a radioactive form of B₁₂ was administered orally and its appearance in the urine was a sign of absorption. Radioactive B₁₂ is no longer available, and Schilling tests are no longer performed. Other approaches to the differential diagnosis of B₁₂ malabsorption are now employed.

Pernicious Anemia PA may be defined as a severe lack of IF due to gastric atrophy. It is a common disease in northern Europeans but occurs in all countries and ethnic groups. It is more frequent in people of African than Asian ancestry. The overall incidence is about 120 per 100,000 population in the United Kingdom (UK). The ratio of incidence in men and women among whites is ~1:1.6, and the median age of onset is 70–80 years, with only 10% of patients being