

cobalamin or rises in serum MMA levels have been demonstrated, however, these patients also should be given regular maintenance cobalamin therapy. Cobalamin should be given routinely to all patients who have had a total gastrectomy or ileal resection. Patients who have undergone gastric reduction for control of obesity or who are receiving long-term treatment with proton pump inhibitors should be screened and, if necessary, given cobalamin replacement.

Replenishment of body stores should be complete with six 1000- μ g IM injections of hydroxocobalamin given at 3- to 7-day intervals. More frequent doses are usually used in patients with cobalamin neuropathy, but there is no evidence that they produce a better response. Allergic reactions are rare and may require desensitization or antihistamine or glucocorticoid cover. For maintenance therapy, 1000 μ g hydroxocobalamin IM once every 3 months is satisfactory. Because of the poorer retention of cyanocobalamin, protocols generally use higher and more frequent doses, for example, 1000 μ g IM, monthly, for maintenance treatment.

Because a small fraction of cobalamin can be absorbed passively through mucous membranes even when there is complete failure of physiologic IF-dependent absorption, large daily oral doses (1000–2000 μ g) of cyanocobalamin are used in PA for replacement (especially in Canada and Sweden) and maintenance of normal cobalamin status in, for example, food malabsorption of cobalamin. Sublingual therapy has also been proposed for those in whom injections are difficult because of a bleeding tendency and who may not tolerate oral therapy. If oral therapy is used, it is important to monitor compliance, particularly with elderly, forgetful patients. This author prefers parenteral therapy for initial treatment, particularly in severe anemia or if a neuropathy is present, and for maintenance in PA. Oral B₁₂ therapy even with low doses of 50 μ g daily may have a larger role in treating food malabsorption of B₁₂.

For treatment of patients with subnormal serum vitamin B₁₂ levels with a normal MCV and no hypersegmentation of neutrophils, a negative IF antibody test in the absence of tests of B₁₂ absorption is problematic. Some (perhaps 15%) cases may be due to TC I