**Abstract**:

**Objective** Gastric bypass surgery, also called Roux-en-Y gastric bypass (RYGB), can result in the malabsorption of medications, requiring the use of higher than usual doses in order to achieve a therapeutic effect. We describe the results of hydroxychloroquine (HCQ) blood levels in three patients with systemic autoimmune disease taking standard HCQ doses, and their associated disease activity levels.

**Methods** A retrospective review of all patients who had undergone RYGB and were taking HCQ in a rheumatology community-based practice.

**Results** Two patients with systemic lupus erythematosus and one patient with primary Sjogren’s syndrome had previously undergone RYGB. All three had subtherapeutic HCQ blood levels and active disease. Increasing their HCQ doses above the recommended 400 mg a day dosing resulted in therapeutic HCQ levels in all three patients and better disease control in two of the three patients.

**Conclusions** RYGB patients may not absorb HCQ adequately, resulting in subtherapeutic HCQ blood levels and inadequate disease control. Patients who have undergone RYGB and are taking HCQ should have drug levels monitored. RYGB patients may require higher than recommended doses of HCQ in order to achieve better disease control and avoid unneeded additional immunosuppressive agents.