Background: A significant percentage of patients with large hiatal hernia (HH) ≥ 5cm have iron deficiency anemia (IDA) secondary to chronic bleeding from Cameron lesions, commonly missed in upper endoscopy.

Aim: To assess the diagnostic yield of video capsule endoscopy (VCE) in subjects with IDA and large hiatal hernia.

Methods: We retrospectively evaluated 200 patients with HH and persistent IDA who underwent VCE between 2010 and 2015 after a negative endoscopic work-up. The study group consisted of 78 patients with documented pre-exam hemoglobin (Hgb) level consistent with IDA and large HH determined ≥ 5 cm in upper endoscopy and/or computed tomography (CT) test. The control group consisted of 78 patients underwent VCE due IDA without an evidence of large HH.

Results: A total of 156 subjects including the study and control groups in whom 78 subjects had IDA with large HH. Mean minimal Hgb level in the study group was 8.76± 2.07mg/dL, Cameron lesions demonstrated in 8(10%), 17 (21.8%) had overt gastrointestinal bleeding, 17(22.7%) had probable and 34(43.6%) possible causes for IDA other than Cameron lesions. Bleeding and non bleeding angioectasis were the most common probable and possible causes for anemia,7(9%) and 16(20.5%) respectively while 4(5.1%) and 19(24.3%) in controls (p<0.05). Excluding Cameron lesions, no significant differences in the prevalence of other susceptible causes of anemia were found between the two groups (p<0.05).

Conclusions: Further investigation looking for other reasonable causes of iron deficiency anemia should be completed in subjects with large hiatal hernia having no additional relevant endoscopic findings.