

# **Journal of Clinical Images**

**Open Access | Clinical Image** 

# Plummer-Vinson Syndrome Decades after Gastric Surgery

## Chothia MY\*; Titus G

Division of General Medicine, Department of Medicine, Faculty of Medicine and Health Sciences, Stellenbosch University and Tygerberg Hospital, South Africa.

\*Corresponding Author(s): Mogamat-Yazied Chothia Division of General Medicine, Department of Medicine, Faculty of Medicine and Health Sciences, Stellenbosch University and Tygerberg Hospital, Ward A7, Francie van Zijl Drive, Parow Valley, Cape Town, South Africa, 7505. Tel: 27-21-938-6590; Email: yaziedc@sun.ac.za

Received: Oct 21, 2020 Accepted: Nov 23, 2020 Published Online: Nov 24, 2020 Journal: Journal of Clinical Images Publisher: MedDocs Publishers LLC Online edition: http://meddocsonline.org/ Copyright: © Chothia MY (2020). This Article is distributed under the terms of Creative Commons Attribution 4.0 International License

### **Clinical image description**

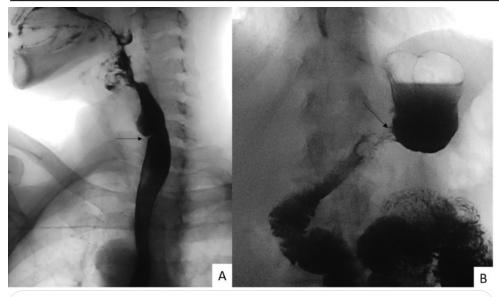
A 70-year-old woman who had surgery for peptic ulcer disease (40-years ago), presented with a 3-year history of progressive dysphagia for solid foods and 20 kg weight loss. Examination revealed a weight of 50 kg, conjunctival pallor, glossitis, and koilonychia. Her haemoglobin concentration was 7.7 g/dL (normal range: 10.5-15.0 g/dL) and mean corpuscular volume was 61 fL (normal range: 81-96 fL). Iron studies confirmed an iron deficiency anaemia with serum ferritin of 10  $\mu$ g/L (normal range: 13-150 µg/L) and transferrin saturation of 3% (normal range: 15-50%). A barium swallow revealed a hypopharyngeal web at the C5-C6 vertebral level (Figure 1A) as well as a Billroth I gastrectomy (Figure 1B). A diagnosis of Plummer-Vinson syndrome was made. The patient was commenced on oral iron supplementation. Six months later, she reported significant improvement of her dysphagia, and her weight had increased to 55 kg. Repeat laboratory testing revealed that the patient was iron replete. Annual oesophagogastroduodenoscopy for hypopharyngeal carcinoma surveillance will be performed.

The classic triad of dysphagia, iron deficiency anaemia and an oesophageal web is known as Plummer-Vinson syndrome [1]. It usually occurs in women during the fourth to seventh decades of life. The aetiology is unknown, but iron deficiency anaemia plays an integral role [2]. Since we could not identify other causes of blood loss, the Billroth I gastrectomy was thought to be the primary cause of her iron deficiency since latter has been reported to occur decades following surgery [3]. As it carries a high risk for the development of hypopharyngeal carcinoma, frequent surveillance is recommended.

The Human Research Ethics Committee of Stellenbosch University approved this case and the patient gave written informed consent.



**Cite this article:** Chothia MY, Titus G. Plummer-Vinson syndrome decades after gastric surgery. 2020; 3(1): 1075.



**Figure 1:** Barium swallow showing a hypopharyngeal web (black arrow) at the C5-C6 vertebral level **(A)**. Barium swallow showing the end-to-end gastric to duodenum anastomosis (black arrow) of the Billroth I reconstruction **(B)**.

#### References

- 1. Novacek G. Plummer-vinson syndrome. Orphanet J Rare Dis 2006; 1: 1-4.
- 2. Hoffman RM, Jaffe PE. Plummer-Vinson syndrome: A case report and literature review. Arch Intern Med 1995; 155: 2008-2011.
- 3. Tovey FI, Godfrey JE, Lewin MR. A gastrectomy population: 25-30 years on. Postgrad Med J 1990; 66: 450-456.