CLINICAL CASE

PLUMMER-VINSON SYNDROME AS AN UNCOMMON CAUSE OF PROGRESSIVE DYSPHAGIA

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Abstract

Plummer–Vinson syndrome (PVS) is a very rare condition associated with iron-deficiency anemia and an increased risk of squamous cell carcinoma of the upper gastrointestinal tract.

We present the case of a 65-year-old woman with progressive dysphagia in whom endoscopic evaluation revealed cervical esophageal webs. Treatment with endoscopic dilation and iron supplementation led to clinical resolution.

This case highlights the importance of considering PVS in the differential diagnosis of dysphagia and of implementing targeted management with appropriate follow-up.

Keywords: Plummer-Vinson, esophageal web, dysphagia, anemia.

Introduction

Plummer-Vinson syndrome is a very rare clinical condition defined by the triad of iron-deficiency anemia, dysphagia, and esophageal membranes, and its presentation has been described predominantly in middle-aged women[1]. Its pathophysiology is not fully understood, although it has been proposed that iron deficiency promotes epithelial atrophy and impairments in mucosal repair[2].

Clinical case

A 65-year-old woman was referred for progressive dysphagia with solids that had been present for 12 months, associated with weight loss. The symptoms were initially attributed to poorly fitting dentures and possible oral candidiasis, but there was no improvement following treatment.

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Physical examination revealed glossitis, angular cheilitis, and a depapillated tongue. Laboratory tests showed iron-deficiency anemia.

The esophagogram revealed a proximal esophageal membrane. Upper gastrointestinal endoscopy confirmed stenosis secondary to two cervical esophageal membranes without associated malignant lesions. Progressive endoscopic balloon dilation was performed (initially 7–8 mm, increased to 10–12 mm in a second session) without complications, resulting in immediate symptomatic improvement. Treatment with oral iron was initiated, and laboratory values subsequently returned to normal.

Discussion

PVS is currently a rare cause of dysphagia in developed countries[1]. Its diagnosis may be delayed because symptoms are initially attributed to more common causes. Recognition of mucocutaneous signs of iron deficiency can guide the diagnosis.

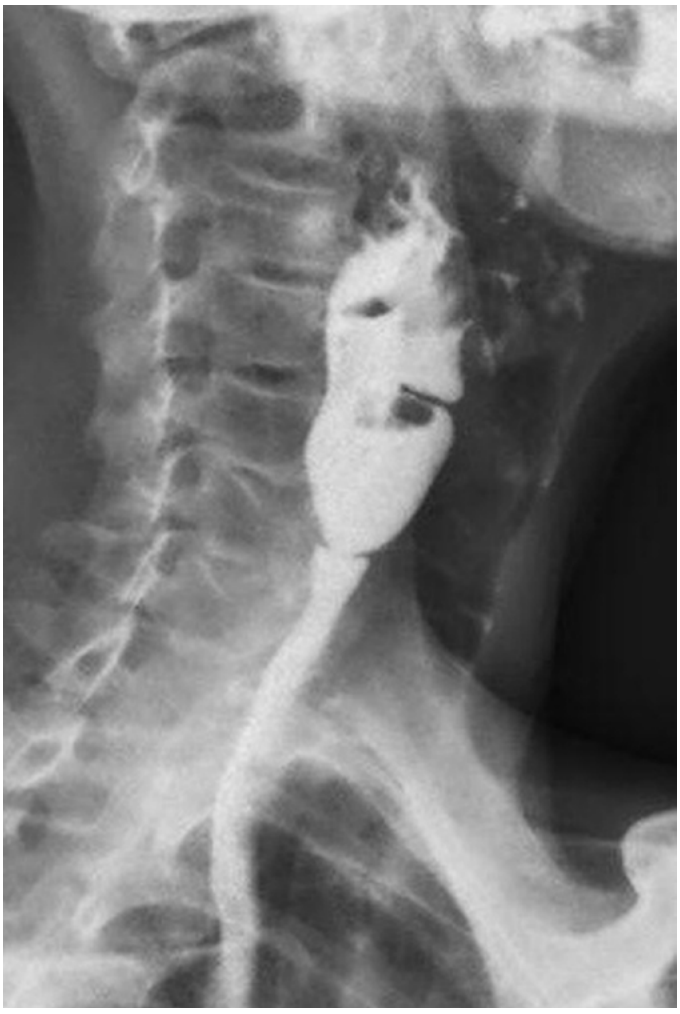

Figure 1. ***Barium esophagram showing a proximal esophageal membrane with concentric narrowing of the lumen, a characteristic finding of Plummer-Vinson syndrome.***

Iron supplementation forms the basis of treatment and can improve dysphagia in the early stages, whereas in cases with established stenosis, endoscopic dilation is safe and effective[1,2]. Despite its current low prevalence in developed countries, it remains clinically significant due to its association with squamous cell carcinoma of the hypopharynx and esophagus, underscoring the importance of early diagnosis and regular clinical follow-up[3].

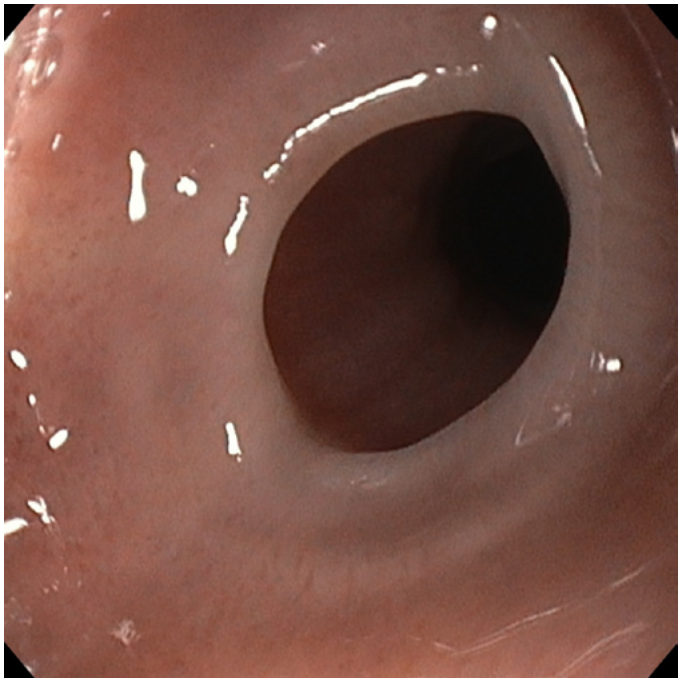

Figure 2. ***Upper gastrointestinal endoscopy showing a cervical esophageal membrane with concentric narrowing of the lumen and a reduced central orifice, consistent with Plummer-Vinson syndrome.***

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