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Plummer-Vinson syndrome consists of the triad of dysphagia, esophagitis, and iron deficiency anemia. The disease is more common in women than in men and often occurs in the menopausal period after age 50. The gastrointestinal symptoms [1] associated with this disease are:

- Intermittent dysphagia to solids that progresses over years
- Occasionally weight loss

The classic clinical signs and findings include [1]:

- Triad of dysphagia, iron deficiency anemia, upper esophageal webs (see Fig. 3.1)
- Signs and symptoms of iron deficiency often predominate
- Esophageal webs are smooth, thin, and gray with a central lumen. Usually extend from the anterior wall laterally and are found in the proximal part of the esophagus
- More common in Caucasians
- Incidence decreases with improved nutrition
- Typically presents in women in fourth to seventh decades of life

The pathogenesis of Plummer-Vinson syndrome is unclear [1]:

- Iron deficiency is important, but it is neither necessary nor sufficient to cause the syndrome

The pathology of mucosal biopsies will show [1]:

- One or more thin horizontal membranes consisting of squamous epithelium and submucosa

The diagnosis is made by finding [1]:

- One or more esophageal webs in a patient with postcricoid dysphagia and iron deficiency anemia
- Esophageal webs can be visualized by barium swallow or upper endoscopy
- Endoscopy needs to begin under direct visualization in order not to push through and rupture the webs

The differential diagnosis of Plummer-Vinson syndrome should include [1, 2]:

- Malignant tumors
- Esophageal strictures
- Diverticula
- Motility disorders
- Scleroderma
- Gastroesophageal reflux disease
- Diabetes mellitus
- Neuromuscular disorders
- Skeletal muscle disorders

The treatment involves [1]:

- Iron replacement to treat iron deficiency
- Determination of the cause of iron deficiency

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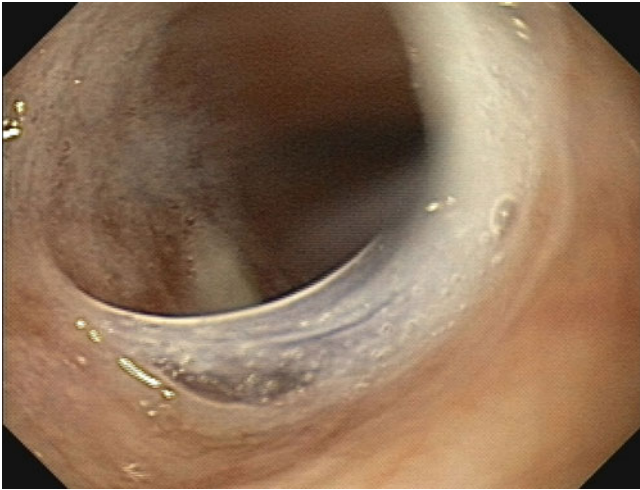


Fig. 3.1 An endoscopic view of an esophageal web in Plummer-Vinson syndrome. A thin membranous constriction is typical (Courtesy of Connecticut Gastroenterology Institute)

References

1. Novacek G. Plummer-Vinson syndrome. *Orphanet J Rare Dis.* 2006;1:36.
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