

Sideropenic Dysphagia

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Abstract: *Siderophic dysphagia is a premalignant condition due to vitamin deficiency. If untreated may lead to Squamous cell carcinoma, the most commonest oral cancer in India. A thorough knowledge of this pre cancerous condition is a must for all the clinical practioners which is discussed in detail in this article*

Keywords: Precancerous condition, Plummer Vinson syndrome

1. Introduction

Plummer–Vinson syndrome (PVS), also called Paterson–Brown–Kelly syndrome or sideropenic dysphagia, is a rare disease characterized by difficulty in swallowing, iron deficiency anaemia, glossitis, cheilosis and oesophageal webs¹.

The reduction in the prevalence of PVS has been hypothesized to be the result of improvements in nutritional status and availability in countries where the syndrome was previously described. It generally occurs in postmenopausal women. Its identification and follow-up is considered relevant due to increased risk of squamous cell carcinomas of the oesophagus and pharynx^{2,3}.

2. Etiology

The cause of PVS is unknown; however, genetic factors and nutritional deficiencies may play a role. It is more common in women particularly in middle age (peak age is over 50). In these patients, oesophageal squamous cell carcinoma risk is increased therefore, it is considered a premalignant process^{2,4}.

The condition is associated with koilonychia, glossitis, inflammation of the lips (cheilitis), and splenomegaly. Oesophageal web in Plummer-Vinson syndrome is found at upper end of oesophagus (post cricoid region) and Schatzki ring may be found at the lower end of oesophagus.

3. Clinical and Radiographic Features

Most reported patients with PVS are between 30 and 50 years of age. Patients typically complain of burning sensation associated with the tongue and oral mucosa. Sometimes the discomfort is so severe that dentures cannot be worn.

Angular Cheilitis is often present and may be severe. Marked atrophy of the lingual papillae, which produces a smooth, red appearance of the dorsal tongue, is seen clinically^{5,6}.

Patients also frequently complain of difficulty in swallowing (Dysphagia) or pain on swallowing. An evaluation with endoscopy or oesophageal barium contrast radiographic studies usually shows the presence of abnormal bands of tissue in the oesophagus, called oesophageal webs.

Another sign is an alteration of the growth pattern of the nails, which results in a spoon shaped configuration (koilonychia). The nails may also be brittle⁷.

Symptoms of anaemia may prompt patients with Plummer-Vinson Syndrome to seek medical care. Fatigue, shortness of breath, and weakness are characteristic symptoms⁸.

4. Diagnosis

Following clinical presentations may be used in the diagnosis of this condition.

- 1) Dizziness
- 2) Pallor of the conjunctiva and face
- 3) Erythematous oral mucosa with burning sensation
- 4) Breathlessness
- 5) Atrophic and smooth tongue
- 6) Peripheral rhaggades around the oral cavity

The following tests are helpful in the diagnosis of Plummer-Vinson syndrome.

5. Treatment

Treatment is primarily aimed at correcting the iron-deficiency anaemia. Patients with PVS should receive iron supplementation in their diet. This may improve dysphagia and pain. If not, the web can be dilated during upper-endoscopy to allow normal swallowing and passage of food^{9,10,11}.

6. Conclusion

As this condition occurs due to vitamin deficiency, it can be diagnosed at the earliest as the symptoms can present early in the oral cavity. Thus, as far as dentists are concerned, they play a major role in early diagnosis of the Plummer-Vinson

syndrome. So the symptoms can be suppressed and early treatment can be commenced as soon as possible, which would decrease the rate of occurrence of the disease. So, the dentists should be much aware of these conditions and help the physicians to undergo preventive treatment as early as possible.

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