

PLUMMER-VINSON SYNDROME

Patchrin PEKANAN, Utaiwan SUTIART

ABSTRACT

Plummer-Vinson Syndrome or Paterson-Brown-Kelly syndrome denoted the association of dysphagia, angular stomatitis, and lingual abnormalities with iron deficiency anemia.¹ It is rarely seen in Thai population, especially nowadays. We report a case of this syndrome in a Thai patient.

CASE REPORT

A 41-year old female patient, admitted in 1991, had dysphagia especially for solid food for 3 days. She had mild intermittent similar symptom for 5 years. She felt easily tired for 2 years. Her hematocrit varied between 23% - 27%. Physical examination showed glossitis. Bone marrow biopsy was compatible with iron deficiency anemia. Barium swallowing study showed a web at the junction of the hypopharynx and the upper esophagus (Fig. 1). The anemic problem responded well with blood transfusion and iron replacement. The dilatation of the obstructed part of the food pathway with esophagoscope showed no change in appearance of the web.

DISCUSSION

Most patients of Plummer-Vinson syndrome are middle-aged women. Clinical manifestations are (a) glossitis; mucosal changes in the mouth, pharynx, and proximal segment of the esophagus (webs, bands, mucosal folds) causing dysphagia; (b) simple hypochromic anemia; (c) achlorhydria; (d) other reported abnormalities: spoon-shaped fingernails, splenomegaly, association with Kartagener syndrome, postcricoid carcinoma.^{2, 3}

The dysphagia is due to the development of a mucosal web at the juncture of the hypopharynx and esophagus. Multiple webs may develop, usually extending from the anterior wall of the esophagus into the lumen. Occasionally, they may encircle the lumen, forming a cufflike structure. In other patients a stricture with or without a web may be found, drastically constricting the opening in the esophagus at the level of the cricoid cartilage. Relief of the dysphagia requires rupturing of the webs or dilatation of the stenosis, because repletion of the iron stores alone is not effective.¹

Other gastrointestinal complaints, such as anorexia, pyrosis, flatulence, nausea, belching and constipation, are common in association with advanced iron deficiency anemia.¹

The spleen is slightly enlarged in about 10 percent of patients with iron deficiency anemia. There are no specific pathologic changes in the organ, and the splenomegaly recedes with correction of the iron deficiency.¹

Neuralgic pains, numbness, and tingling without objective neurologic abnormalities are reported by 15 to 30 percent of patients, and rarely iron deficiency anemia may lead to increased intracranial pressure, papilledema, and the clinical picture of pseudotumor cerebri.¹

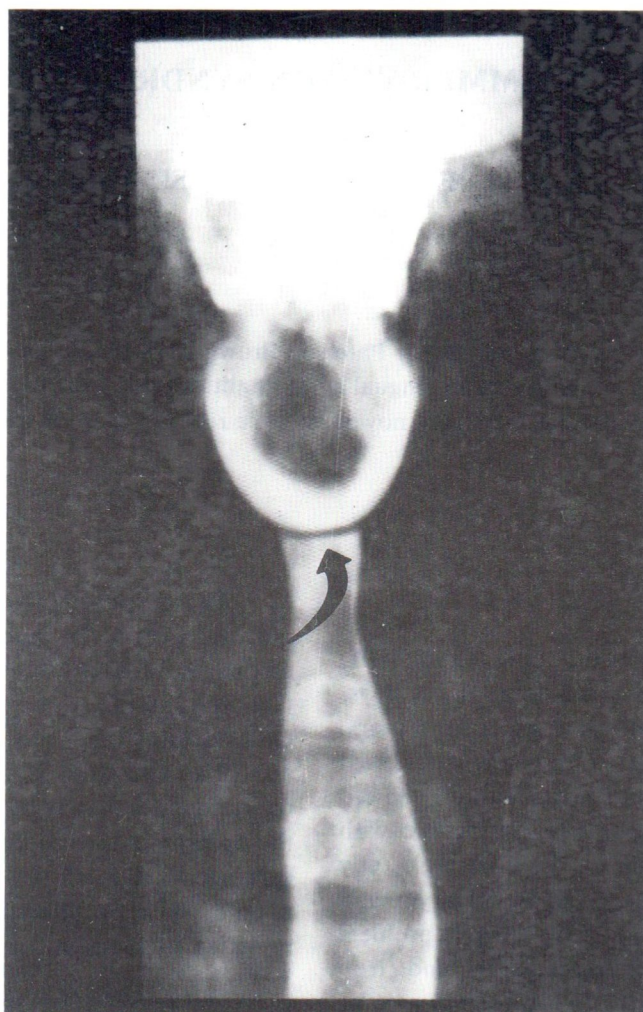


Fig. 1 AP view of the esophagogram revealed a circumferential web in a 41-years-old female patient with iron deficiency anemia.

REFERENCES

1. Kushner JP. Hypochromic anemias. In: Wyn-gaarden et al eds. Cecil, Textbook of Medicine. Philadelphia: W.B. Saunders, 1992: 843.
2. Taybi H. Radiology of syndromes, metabolic disorders, and skeletal dysplasias. Chicago: Year book medical publishers, 1990: 365.
3. Beitman RG, et al. Oral manifestations of gastro-intestinal disease. Dig Dis Sci 1981; 26: 741.
4. Kelly AB. Spasm of the entrance to the esophagus. J Laryngol Otol 1919; 34: 285.
5. Miller G. Patterson-Kelly, Plummer-Vinson syndrome (letter). Dig Dis Sci 1980; 25: 813.
6. Nicoli F, et al. Radiologic and endoscopic diagnosis in Plummer-Vinson syndrome. Rays 1986; 11: 51.
7. Paterson DR. A clinical type of dysphagia. J Laryngol Otol 1919; 34: 289.
8. Plummer HS. Diffuse dilatation of the esophagus without anatomic stenosis (cardiospasm): A report of ninety-one cases. JAMA 1912; 58: 2013.
9. Todd NW Jr, et al. A patient with Kartagener and Paterson-Brown-Kelly syndromes. JAMA 1975; 234: 1248.
10. Vinson PP. Hysterical dysphagia. Minn Med 1922; 5: 107.