

Research Article

A Case Report on Plummer-Vinson Syndrome

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ABSTRACT

PVS is a condition that can occur in people with long term exposure to iron deficiency anaemia. The exact cause of PVS is obscure. PVS classically presents as a triad of symptoms like –Iron deficiency anaemia/microcytic hypochromic anaemia, (post cricoids dysphagia, upper oesophageal webs. It generally occurs in premenopausal women. Even though the syndrome is very rare, now-a-days it's recognition is very important because it identifies a group of patients at increased risk of squamous cell carcinoma of pharynx and oesophagus. The significance of Plummer Vinson syndrome is its association with cancers of head and neck[6]. We report a case of 65 years old male patient who has classical presentations of PVS. A male patient of age 65 years old was reported to general medicine department with complaints of- difficulty in swallowing since 20 days; dysphagia to solids, not for liquids. Patient gave history of constipation on & off since 20 days associated with blood, scanty; history of passage of black coloured stools since 20 days; decreased appetite. Early diagnosing of PVS is important to prevent it's complications. Treatment is primarily aimed at correcting the iron deficiency anaemia and oesophageal dilatation is done to provide symptomatic relief.

Keywords: Plummer-Vinson syndrome, Iron deficiency anaemia, Oesophageal webs.

INTRODUCTION

PVS is also known as Patterson Kelly-Brown syndrome[1]; Hysterical dysphagia[7]. It is a premalignant condition. The word syndrome, which indicates group of symptoms that occur together in PVS. The PVS is associated with triad of symptoms comprising of microcytic hypochromic anaemia, oesophageal strictures, dysphagia[3]. It is also associated with other symptoms like- glossitis, cheilosis, odenophagia, koilonychia[5]. It is mostly seen in females and has been rarely described in males. The etiology of PVS is undetermined. Although genetic predispositions, nutritional deficiencies[4] and several other mechanisms has been hypothesised. The documentation remains weak although iron deficiency anaemia appears to play an important role. The pathogenesis of PVS remains conjunctive[4]. The diagnosis of PVS is important and is made by the clinical manifestations in the patients, anaemia workup and the imaging techniques involved – Barium oesophagography, video fluoroscopy[7]. oesophagogastroduodenoscopy. Barium oesophagography is most commonly used technique. Iron supplements may improve the swallowing problems. The web of tissue can also

be widened during upper endoscopy, this will allow you to eat normally.

Case Presentation

A male patient of age 65 years old was reported to general medicine department with complaints of- difficulty in swallowing since 20 days; dysphagia to solids, not for liquids. Patient gave history of constipation on & off since 20 days associated with blood, scanty; history of passage of black coloured stools since 20 days; decreased appetite. The patient has past medical history of appendectomy 15 years back and used iron tablets 3 days back. On general examination, patient's palpebral conjunctiva and skin was pale signifying anaemia. Peripheral smear study revealed microcytic anaemia and thrombocytopenia. The haemoglobin value of the patient was found to be 5.4gm/dl. Labs were notable for ESR of 35mm/hr, platelet count of 95,000, RBC of 1.2 millions/cumm. The LFT revealed slight increase in the bilirubin values as mentioned T.bilirubin-1.8mg/dl. Subsequently, a radiographic examination which consisted of barium swallow test was done which revealed slight constriction of oesophagus. Partial web is seen suggestive of cervical-oesophageal web. The clinical, haematological and radiological findings

fulfil the triad of PVS. The patient was given with oral iron supplement of 5mg with dietary supplements. The patient should eminent improvement in his symptoms after the treatment course.

DISCUSSION

The association of dysphagia, Iron deficiency anemia and upper oesophageal webs[9] is known as Plummer-Vinson syndrome. This syndrome is mostly seen in women, but rarely in men. The exact cause of PVS is obscure but in our patient the cause of the syndrome was probably related to iron deficiency anaemia. The Barium oesophagography is most commonly used imaging technique but the oesophagogastroduodenoscopy is most helpful because as it also dilates the oesophagus as a part of therapy. The patients with PVS should receive iron supplementation in their diet, this may improve dysphagia and pain. The PVS must be carefully monitored as it is a precancerous condition.

CONCLUSION

As PVS is a precancerous condition with high malignant potential, early diagnosis is of utmost importance for better prognosis and treatment[5]. It is important to evaluate any chief complaint of dysphagia and to be cautious of any alarming symptoms. Managing the oesophageal webs of PVS and repleting iron stores at an early stage is crucial as the webs can progress to oesophageal or pharyngeal squamous cell carcinoma[3].

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