

Case Study on Plummer-Vinson Syndrome

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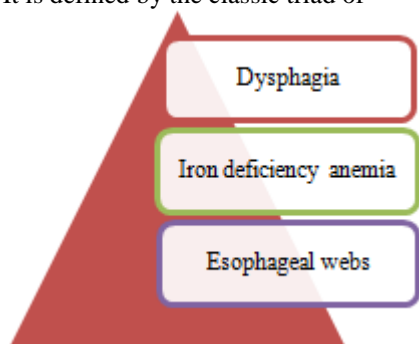
Abstract: A 27 year old female got admitted with the complaints of giddiness, palpitation, difficulty in swallowing, painful swallowing, breathlessness, tiredness, loss of appetite for two months. She had a history of poor intake of food. On physical examination, she is thin body built, pale conjunctiva, koilonychia, increased capillary refilling time (>3sec). Her BMI is 16.4kg/m². She underwent investigations. The blood investigations revealed that Hb- 5.5gms%, PCV- 20.5, ESR- 87mm/hr, TLC- 10,190/cumm, RBC- 3.99million cells/ul. Peripheral smear showed hypochromic microcytic anemia. Chest x-ray showed right sided pleural effusion. USG abdomen is evidenced endometrial cyst, Upper GI endoscopy indicated web in the esophagus (post cricoid region)

1. Introduction

Plummer-Vinson Syndrome (PVS) also called Paterson Brown Kelly Syndrome or Sideropenic dysphagia. It is a rare disease characterized by difficulty in swallowing, iron deficiency anemia, glossitis, cheilosis and esophageal webs.

2. Definition

It is defined by the classic triad of



Incidence

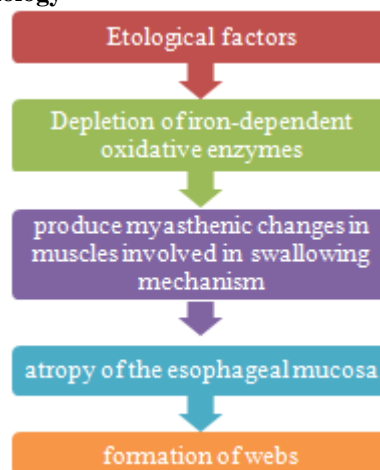
- More frequently observed in middle- aged women
- Typical age range at diagnosis is 40-70 years
- The rapid fall in the prevalence of the syndrome correlated with the improvement of nutritional status.

Etiology

The etiology is unknown. The most important possible etiological factors are

Book Picture	Client Picture
Iron and nutritional deficiencies	✓
Malnutrition	✓
Genetic predisposition	X
Autoimmune factors	X

Pathophysiology



Clinical Manifestation

Book Picture	Client Picture
Dysphagia	✓
Odynophagia	✓
Atrophic glossitis	X
Pain	✓
Angular stomatitis	✓
Weakness	✓
Burning sensation of the tongue	✓
Cheilitis	✓
Koilonychia	✓
Splenomegaly	✓

Diagnostic Evaluation

- Barium swallow x-ray to detect esophageal web
- Videofluoroscopy
- Upper GI endoscopy
- Haemoglobin
- Hematocrit
- MCV
- Sr.Iron & ferritin level

Management

- Iron supplementation to correct the anemia
- Esophageal web can be mechanically dilated during upper endoscopy
- YAG laser therapy to disrupt an esophageal web

Complications

- Squamous cell carcinoma of the pharynx and the esophagus
- Risk of perforation of the esophagus with the use of dilators for treatment

3. Discussion

She has the triad symptom of dysphagia, anemia and esophageal webs. She has been transfused with one unit of O^{+ve} blood, treated with Inj. Neurobion forte 100mg, Inj. Encifer 100mg, thrice a week, Inj. Trineurosol 100mg, OD and Tab. Methylcobalamin 500mg, BD. Her haemoglobin level increased to 7gms%. She was advised to take iron rich diet. She got discharged after 5 days of hospitalization.

References

- [1] Kelly.,A.B., (2010). Spasm at the entrance of the esophagus. The journal of Laryngology, Rhinology, and Otology, London, 3: 285-289
- [2] Novacek G (2006). Plummer- Vinson syndrome., Orphanet J Rare Dis. 1:36. Doi:10.1186/1750-1172-1-36
- [3] Plummer- Vinson syndrome, (2011).MedlinePlus Medical Encyclopaedia.
- [4] Plummer- Vinson syndrome, PubMed Health. Retrieved on 31 january 2012.