The Dark Side of Dysphagia: Esophageal Melanocytosis

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CASE REPORT

A 52-year-old woman with a history of vitamin B12 deficiency and anemia presented for the evaluation of dysphagia, weight loss, and worsening anemia. Esophagogastroduodenoscopy showed an esophageal stricture beyond which the midportion of the esophagus appeared dark brown to black (Figure 1). Pathology of esophageal biopsies revealed dendritic melanocytes in the lower portion of the squamous mucosa, best illustrated on a Fontana-Masson stained tissue section for melanin (Figure 2).

In addition, a Sox10 immunohistochemical stain marked the nuclei of the benign melanocytes, confirming the diagnosis of esophageal melanocytosis (EM) (Figure 3). The patient underwent serial esophageal dilations and proton pump inhibitor therapy with clinical improvement. EM is a rare condition, generally benign, but it has been considered a precursor of primary esophageal melanoma. It has been thought to arise from the abnormal migration of melanocytes or the keratinocytic differentiation of multipotent stem cells in the esophagus. Gastroesophageal reflux disease, smoking, and chronic alcohol use are considered as risk factors. Because of the generally benign nature of EM, radical procedures are generally not considered. However, because of the potential association with esophageal melanoma, a close clinical follow-up is highly recommended.

Figure 1. Esophagogastroduodenoscopy showing a dark brown to black esophageal stricture beyond the midportion of the esophagus.

Figure 2. Esophageal biopsy revealing dendritic melanocytes in the lower portion of the squamous mucosa.
**Figure 3.** Immunohistochemical stain marked the nuclei of the benign melanocytes, confirming the diagnosis of esophageal melanocytosis.