

## Case Report

## Esophageal stricture in lichen planus

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## Abstract

Lichen planus (LP) is a rare cause of esophageal stricture. It is usually associated with oral mucosal involvement, and the diagnosis has to be considered in these patients who present with dysphagia. We present a case of esophageal stricture secondary to LP.

## Key words

Dysphagia, esophageal stricture, lichen planus

## Introduction

Lichen planus (LP) is a chronic idiopathic disorder involving the skin, nails, and mucosal surfaces including the mouth, pharynx, and perineum. It affects <1% of the general population.<sup>[1]</sup> Mucosal surface involvement is found in about 30–70% of patients diagnosed with LP.<sup>[2]</sup> Mucosal involvement may be found even without evidence of skin lesions. They consist of white plaques, erosions, and rarely ulcerations and involve the buccal mucosa, tongue, genitalia, and anus. Esophageal involvement is rare.<sup>[3]</sup> We report a case of cutaneous and oral LP, controlled on steroids who developed esophageal stricture secondary to involvement by LP.

## Case Report

A 58-year-old female known to have mucocutaneous LP since 7 years was admitted now with progressive dysphagia mainly for solids, for the last 2 years. Her mucocutaneous lesions were partially controlled by short term courses of corticosteroids, administered either topically or systemically. Examination showed multiple pigmented papules with the verrucous surface over both legs and multiple white plaques, erosions, pigmented lesions over buccal mucosa. Rest of the examination was normal.

Hemoglobin was 11.2 g% (normocytic normochromic); total leukocyte counts 6600 cells/c.mm, platelet count 2 lakhs/c.mm, and erythrocyte sedimentation rate 36 mm in 1 h. Peripheral smear showed normocytic normochromic red blood cells and normal platelets. Liver function test, renal function tests, and urinalysis were normal. Chest X-ray was normal. Antinuclear antibody and rheumatoid factor were negative. Barium meal showed narrowing of mid-esophagus and proximal dilatation [Figure 1a]. Upper gastrointestinal endoscopy showed pseudomembranes and a stricture at mid-esophagus [Figure 1b and c]. Histopathology of the lesion showed intestinal metaplasia with moderate lymphocytic infiltrate [Figure 1d]. Based on her clinical features, endoscopic findings, and histopathological features, a diagnosis of mucocutaneous LP with esophageal involvement was made. Endoscopic dilatation was done, and she was started on intravenous methyl prednisolone. She had marked improvement in her symptoms and is under regular follow-up.

## Discussion

LP is a dermatologic condition of unknown etiology involving the skin, nails, and mucosal membranes. The skin lesions are characterized by shiny, violaceous, flat papules, of varying size. It typically remits and recurs, with recurrences lasting years. It affects <1% of the general population.<sup>[1]</sup> Although it can occur at any age, onset is typical in middle-aged patients, and it is particularly common in women in their 50s.

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## Access this article online

## Website:

www.jdeonline.in

## DOI:

10.4103/0976-5042.180091

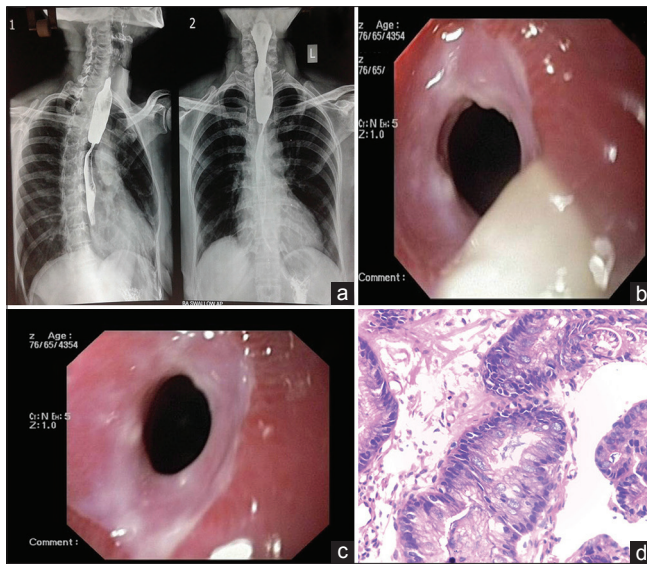
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**How to cite this article:** Alungal J, Abdulla MC, Shaheer R, Narayan R. Esophageal stricture in lichen planus. J Dig Endosc 2016;7:15-6.



**Figure 1:** Barium meal showing narrowing of mid-esophagus and proximal dilatation (a). Upper gastrointestinal endoscopy showing pseudomembranes and a stricture at mid-esophagus (b and c). Photomicrograph showing intestinal metaplasia with moderate lymphocytic infiltrate (H and E stain, ×100) (d)

Esophageal LP is considered to be a rare disease with only about 50 cases reported in the literature. Study of esophageal LP by Eisen showed a prevalence of <1% among patients with oral LP but because of subtle clinical findings and lack of characteristic histologic features, the true prevalence is hard to determine.<sup>[4]</sup> Esophageal LP is often present in patients with extraesophageal involvement, but it may also be present in patients without dermal or oropharyngeal manifestations.

Symptoms can range from asymptomatic to odynophagia and dysphagia. The proximal or mid-esophagus is the most common site of involvement, although the entire esophagus can also be affected with sparing of the gastroesophageal junction. Different types of lesions have been reported and can range from elevated lacy white papules, esophageal webs, pseudomembranes, desquamation, and superficial pinpoint erosions with and without stenosis.<sup>[5]</sup> Most case reports mention the characteristic finding of peeling of the mucosa away from the esophagus leaving a friable, inflamed surface that bleeds on contact. Strictures are also common in these patients and may represent a progression from inflammation to ulceration, fibrosis with subsequent stricture formation. The findings may be mistaken for reflux esophagitis, eosinophilic esophagitis, or candida esophagitis. Esophageal Lichen Planus (ELP) may be distinguished from reflux esophagitis endoscopically by the sparing of the gastroesophageal junction. Biopsies are necessary to differentiate ELP from other disorders.<sup>[6]</sup>

The most characteristic histologic finding in esophageal LP is a band like or lichenoid lymphocytic infiltrate involving

the superficial lamina propria and basal epithelium. A predominance of mature T cells is present within this infiltrate. These are associated with basal keratinocyte degeneration which often includes Civatte bodies (necrotic keratinocytes with anucleate remnants).<sup>[7]</sup> Lymphocytic infiltration of the mucosa is not pathognomonic of this disease and medications such as gold, thiazide, and antimalarials can induce LP - like lesions and need to be excluded clinically. Our patient was not on any above mentioned drugs.

Systemic corticosteroids are considered the first-line treatment of ELP. Topical fluticasone propionate has recently been used, with mixed results. It has the advantage of rapid action and minimal absorption and side effects of systemic steroids.<sup>[8]</sup> In patients who remain symptomatic despite medical management, endoscopic dilatation is a viable option. The earlier concerns of stricture induction by the Koebner phenomenon (lesions along the lines of trauma) resulting from endoscopy or dilation have not been supported in the literature.

Our patient was started on parenteral methylprednisolone, and she underwent endoscopic dilatation and she had marked improvement in her symptoms. We report this case because esophageal stricture secondary to LP is extremely rare.

#### Financial support and sponsorship

Nil.

#### Conflicts of interest

There are no conflicts of interest.

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