# Polypectomy of Esophageal Polyp due to Esophagitis

Ari Fahrial Syam, Marcellus S. Kolopaking, Chudahman Manan

Division of Gastroenterology, Department of Internal Medicine, Faculty of Medicine, University of Indonesia/Cipto Mangunkusumo Hospital, Jakarta

## **ABSTRACT**

Esophageal polyp can be found by chance during endoscopic examination. Polyps can be formed by changes in the esophageal mucosa due to reflux esophagitis. We report a case of multiple esophageal polyp in a patient with complaints of recurrent regurgitation without heartburn. Endoscopy demonstrated multiple polyps at the distal esophagus. Anatomic pathology evaluation of the polyp demonstrated mucosa lined with squamous epithels demonstrating elongation of the papilla and deposition of acute and chronic inflammatory cells, indicating chronic esophagitis with hyperplastic epithels. In this case, we conducted recurrent ligation of the multiple polyps. Evaluation at 2 weeks after the final ligation demonstrated no polyp remains, and the post-ligation ulcer was found. Evaluation at 1 month following treatment found diminished complaints. From this case, we can conclude that endoscopy is an important investigation modality to establish the diagnosis in cases of chronic gastrointestinal complaints. Ligation is a choice for the management of esophageal polyps.

Key words: Esophageal polyp, polipectomy, ligation.

#### INTRODUCTION

Esophageal tumor are often found by chance during endoscopy or radiologic examination. Benign epithelial tumors in the esophagus can take the form of squamous papilloma or adenoma, whild benign non-epithelial tumors found in the esophagus include leiomyomas, hamartomas, fibromas, lypomas, lymphangiomas, granullar tumor cells and fibrovascular polyps. Squamous papillomatous tumors are associated with chronic irritation and reflux esophagitis. They are usually cecile, polypoid, and located at the 1/3 distal esophagus.<sup>2</sup>

The pathologic findings of reflux esophagitis include hightened papilla and basal cell hyperplasia. Elongation of the papilla occurs due to destruction of the cell surface by acids, while basal cell hyperplasia demonstrate accelerated basal cell replication rate. Acute inflammation, characterized by infiltration of polymorphonuclear cells, is specific for esophagitis.<sup>3</sup>

In general, the management of reflux esophagitis includes life style modification and medication. Life style modification include cessation of smoking; cessation of alcohol consumption; reduction of fatty foods, tomato and citrus juices, coffee, tea, and soda drinks; avoiding prior to bedtime snacking; as well as weight reduction for overweight patients. Medications include antacids, mucoprotector agents (sucralphate), H<sub>2</sub> antagonist receptors, proton-pump inhibitors, and prokinetic agents. If reflux esophagitis has caused changes in the mucosa in the form of polyps, polypectomy may be performed.

We report a case of esphageal polyp found by chance during endoscopy due to complaints of dyspepsia without clear complaints of reflux esophagitis.

## **CASE REPORT**

The patient was a 55 year-old male who came with complaints of recurrent epigastric discomfort, unrelated to meals, as well as acidic taste rising to the mouth, nausea, and gassiness. The patient denied any feeling of heartburn. The patient reported recurrent mouth ulcer. He denied any weight loss or changes in defecation pattern. The problem has occurred since 1 year prior to evaluation. The patient had taken antacids, ranitidine. Complaints lessened as the patient took the medication,

and reappeared when he ran out of medication. He denied history of hepatitis, diabetes, and heart disease. During physical examination, his heart and lung were within normal limits. During abdominal examination, the abdomen, liver, and spleen were not palpable.

See Table 1 for reports of laboratory findings.

**Table 1. Results of Routine Laboratory Evaluation** 

Evaluation	Results
Hemoglobin level	12,3 g/dl
Leukocyte count	12.200 /ul
Platelet count	396.000/ul
SGOT	34 U/I
SGPT	23 U/I
Cito blood sugar	100 mg/dl
Complete stool evaluation	Within normal limits

Endoscopy of the upper gastrointestinal tract demonstrated multiple polyps and moderate erosive gastritis. Histopathologic evaluation of the gaster demonstrated moderate distribution of mononuclear cells, no polymorphonuclear cells, no intestinal metaplasia, mild glandular atrophy, and no helicobacter pylori. Histopathologic evaluation of the polyp demonstrated mucosa lined with squamous epithel demonstrating elongation of the papilla and submucosal deposition of acute and chronic inflammatory cells, indicating esophagitis. Repeat histologic evaluation of the esophageal polyp demonstrated chronic esophagitis with hyperplastic epithels, and no signs of malignancy.

The polyp was ligated twice with a time interval of 2 weeks. Post-ligation endoscopic evaluation was

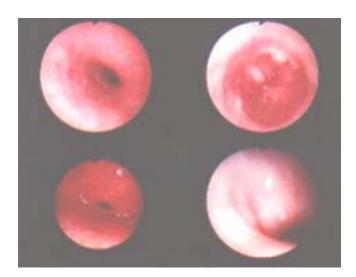


Figure 1. Endoscopy of the upper gastrointestinal tract, demonstrating multiple polyps of the esophagus.



Figure 2. Ligation of the esophageal polyp using local multiple ligators.



Figure 3. Esophagoscopy demonstrating post-ligation ulcer and no more polyp 2 weeks following the final ligation.

conducted 2 weeks following ligation, demonstrating ulcer at the location of ligation and no more polyp. The patient was treated with 2 x 20 mg of omeprazole for 1 week, followed by 1 x 20 mg for the following three weekw, and 1 x 15 cc of fluid sucralphate. During 1 month control after polyp ligation, the complaint of pain had decreased.

### DISCUSSION

Esophageal polyp is a rare case. It is usually found by chance during endoscopy. Polyps are formed due to changes in the esophageal mucosa due to reflux esophagitis. The incidence of esophagitis varies greatly. A study in Cipto Mangunkusumo Hospital found 22.8% cases of esophagitis out of 30 cases of dyspepsia in the year 1998.<sup>4</sup> Another study in the same hospital

demonstrated that almost 96.88% of cases of reflux type dyspepsia were diagnosed as esophagitis according to anatomic pathology evaluation.<sup>5</sup> The diagnosis of reflux esophagitis is established if there are complaints of regurgitation and heartburn, dysphagia, odinophagia, and burping.6 Another study by Juwanto in cases of complaints of reflux esophagitis found 25 out of 32 cases demonstrating signs of esophagitis during endoscopy.<sup>4</sup>

In this case, the patient came with complaints of reflux esophagitis, and endoscopic evaluation discovered an esophageal polyp. Pathologic anatomy examination indicated chronic esophagitis. This data demonstrated that the polyp is a hyperplastic polyp due to esophagitis. Other complications that can occur due to reflux esophagitis may be mild to severe chronic cough, bronchial asthma, vocal cord disorder, stricture, Baret's esophagus, bleeding, and even perforation. Bearing in mind the possible complications, early endoscopic diagnosis must be established in patients with complaints of reflux esophagitis.

At the moment, reflux esophagitis is classified as a gastroesophageal reflux disease (GERD). The main goal in the treatment of the disease is to eliminate symptoms rapidly and effectively. The secondary goal is to heal erosion and ulceration, and thus preventing complications. The best management strategy for GERD is the step-down treatment approach, starting with the strongest anti-acid agent (proton-pump inhibitors) and gradually stepping down by reducing the dose and replacing it with H2 antagonists. Presently, a new proton-pump inhibitor, esomeprazole, is being marketed in several countries. The drug is said to have a stronger control on gastric acid within 24 hours, thus expected to be more effective in the management of GERD in the future. 9

The management of this patient included serial ligation until the polyp is eliminated. Evaluation at 1 month following the final treatment demonstrated no signs of the polyp. Aside from therapeutic endoscopy, the patient received omeprazole for 1 month, with an initial dose of 2 x 20 mg, then reduced to 1 x 20 mg. Complaints of reflux esophagitis gradually diminished after ligation and treatment with proton-pump inhibitors.

## **REFERENCES**

- Rutsgi AK. Esophageal neoplasmas. In Yamada T, Alpers DH, Laine L, Owyang C, Powell DH (editors). Textbook of Gastroenterology. 3<sup>rd</sup> edition. Lippincotts William Wilkins.
- Fernandez-Rodriguez CM, Badia-Figuerola N, Ruiz del Arbol L, Fernandez-Seara J, Dominguez F, Aviles-Ruiz JF. Squamous papilloma of the esophagus: report of six cases with long-term

- follow-up in four patients. Am J Gastroenterol. 1986; 81(11): 1059-62.
- Orlando RC. Reflux esophagitis. In Yamada T, Alpers DH, Laine L, Owyang C, Powell DH (editors). Textbook of Gastroenterology. 3<sup>rd</sup> edition. Lippincotts William Wilkins.
- Lelosutan SAR. Peranan derajat keasaman lambung dan tonus sfingter esofagus bawah terhadap esofagitis pada dispepsia. Tesis akhir Program Pendidikan Dokter Spesialis I Ilmu Penyakit Dalam FKUI, Jakarta 1998.
- Juwanto. Nilai diagnostik pemeriksaan esofagogram barium dan test Bernstein pada esofagitis. Tesis akhir Program Pendidikan Dokter Spesialis I Ilmu Penyakit Dalam FKUI, Jakarta, 2000.
- Martin CJ. Heart burn, regurgitation and non cardiac chest pain. Dalam Talley NJ, Martin CJ (eds). Clinical gastroenterology a practical problem based approach. Mac Linnan & Pty limited, Sydney. 1999; 1-19.
- 7. Freston JW, Malagelada JR, Peterson H, McCloy R. Critical issue in the management of gastroesophageal reflux disease. Eur J Gastroenterol Hepatol 1995; 7: 577-86.
- 8. Jones R, Bytzer P. Review article: acid supression in the management Gastroesophageal reflux disease-an appraisal of treatment options in primary care. Aliment Pharmacol Ther 2001; 15: 765-772.
- Lind T, Rydberg L, Kylebäck A et al. Esomeprazole provides improved acid control versus omeprazole in patients with gastro-oesophageal reflux disease. Aliment Pharmacol Ther 2000; 14: 861-7.

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