# ESOPHAGEAL STENOSIS AND OBSTRUCTION DUE TO CHEMOTHERAPY: REPORT OF A RARE CASE

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Abstract — A 15 year old child with Hodgkin's disease and having received 12 courses of chemotherapy, was referred to this center with esophageal obstruction. After having performed the necessary investigations, a decision was made to undertake surgery. After surgery, the patient recovered completely and presently enjoys a healthy life.

Acta Medica Iranica 35 (3 & 4): 102-103; 1997

Key words: Esophageal stenosis, chemotherapy, colon bypass

# INTRODUCTION

Esophagus disorders can be divided into two types: disorders of motility and disorders of mucosal component, with may lead to esophagitis stricture and ultimately obstruction. The esophagitis stricture and obstruction may be due to asprin-like drug (1) and rarely chemotherapy (2). Breton and co - workers studied 50 patients with small cell carcinoma of the lung that were treated with radiotherapy and then adriamycin. Of them, 28 cases developed dysphagia, patients developed severe stricture and one expired eventually (3).

# PATIENTS AND METHODS

In 1984, a 10 years old child presented to a surgeon with a mass in the left side of neck at the mandibular angle. Confirmed nodular sclerosis type of Hodgkin's disease and patient referred to an oncologist, who initiate the treatment with COPP regimen including: Cyclophosphamide, Oncovin (Vincristine), Procarbazin and Prednisolon. This regimen was continued for six courses. The mass recured, and the patient underwent chemothrapy with another combination for six additional courses without repeating biopsy. This regimen was ABVD (Adriamycin, Bleomycin, Vinblastin and Dacarbazine). Two months after, the end of treatment, the patient presented with epigastric pain and burning and dysphagia to solid food. Barium swallow series was performed and a stenosis was seen above the cardia (Fig. 1).

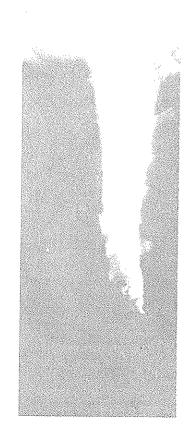


Fig. 1. Barium swallow showing stenosis of the esophagus above the cardia

Esophagoscopy and dilation was performed. The lesion was biopsied and diagnosis of severe ulcerated esophageal was made. After drug treatment and eight times dilation, there was complete dysphagia and he had a 20 kg weight loss. Barium swallow series revealed stasis of barium in esophagus (Fig. 2).



Fig. 2. Barium swallow of the patient

The patient was biopsied again and no malignancy reported. The operations performed has been shown in Table 1.

#### Table 1. Operations performed

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1	Labarotomy	anu	gasterostomy

- 2 Thracotomy and, total thoracic esophagectomy
- 3 Jeunal pedicules, flap with 2 padicules
- 4 Skin tube and skin graft
- 5 Susternal colonic bypass and excellent outcome.

# **RESULTS**

Twenty days after last operation the patient could tolerate foods and was discharged. After 3 years he was 52 kg. Figure 3 shows the passage of contrast material through transposed colon.

## DISCUSSION

It has been reported by Memorial Hospital Solan kettering Cancer Center (MSKCC) that out of 3192 children were concurrently treated with chemotherapy and radiotherapy. 59 cases had esophageal inflammation, and in five patients the inflammation led to stenosis, but in only one patinet esophageal obstruction was developed (4.5). Our patient also suffered from esophageal obstruction due to chemotherapy with MOPP and ABVD regimens. After operation, he recovered completely and presently enjoys a healthy life.

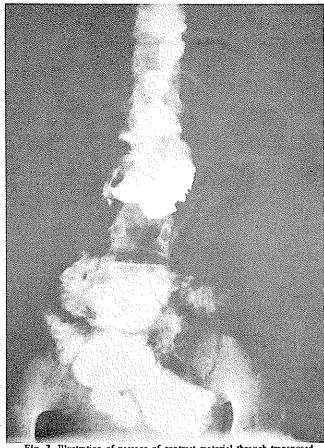


Fig. 3. Illustration of passage of contrast material through transposed colon three years after last operation

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