CORROSIVE OESOPHAGEAL STRICTURE IN MALAYSIAN ADULTS

M. M. SUDHAKAR KRISHNAN

K. C. TAN

INTRODUCTION

Corrosive oesophageal stricture is a relatively common surgical problem encountered in Malaysia. During the period 1968-82, 40 adult patients were treated surgically at the University Hospital, Kuala Lumpur.

Most of the patients were from the lower social economic strata. The precipitating cause was often a trivial familial dispute and many of the patients later harbour a great deal of regret and misery.

In the past there were some controversy with regards to oesophageal resection for stricture because of the hazards of dissecting out a fibrotic oesophagus. We have found this to be relatively safe and in addition it obviates the risk of carcinoma developing in the residual stenosed oesophagus.

MATERIALS AND METHODS

The case records of 40 adult patients with oesophageal stricture due to corrosive burns from 1968 to 1982 were reviewed. Their ages ranged from 15 to 64 years. The majority were in the second and third decade (Table 1). In 28 of our patients caustic soda was the commonest agent used by virtue of its easy availability. Seven cases were of formic acid ingestion and were mainly estate workers.

M. M. Sudhakar Krishnan, MS, FRCS (Edin & Glasg)

K. C. Tan, FRCS (Edin)

Department of Surgery
University Hospital
Kuala Lumpur

TABLE I
CORROSIVE OESOPHAGEAL STRICTURE
AGE AND SEX DISTRIBUTION

Age Group (yrs)	Male	Female
15 - 24	8	15
25 - 34	1	7
35 - 44	1	4
45 - 54	0	3
55 - 65	1	0
Total	11	29

In this series, six patients had periodic oesophageal dilatation with relief of symptoms. Two patients had feeding gastrostomies. Definitive surgical procedures were performed in 32 patients of which nine had oesophageal bypass, and 23 oesophageal resection with a visceral replacement. The colon was used in eight oesophageal bypass procedures and the jejunum in two. One patient who had a colonic bypass developed necrosis of the caecum and was excised and replaced with a loop of jejunum. The stomach was the commonest organ used for replacement of the oesophagus (Table II).

The complications following bypass or oesophageal replacement are shown in Table III. There was one death from oesophageal bypass due to peritonitis and septicaemia and two from oesophageal resection with replacement, one of which was an emergency oesophagectomy for perforation following dilatation. Oesophageal carcinoma was noted in three patients, but in one this was probably coincidental as the time interval between ingestion and diagnosis was only 10

TABLE II
CORROSIVE OESOPHAGEAL STRICTURE

Definitive Surgical Procedure	No. of Patients
Oesophageal bypass:	
Stomach	0
Jejunum	2
Colon	8
Oesophageal resection with replacement:	
Stomach	16
Jejunum	0
Colon	7

TABLE III
CORROSIVE OESOPHAGEAL STRICTURE: COMPLICATIONS FOLLOWING BYPASS, AND RESECTION AND REPLACEMENT OPERATIONS FOR CORROSIVE OESOPHAGEAL STRICTURE

	Bypass Operation No. of Patients	Resection and Replacement No. of Patients
Pulmonary Complications	4	8
Wound Infection	4	7
Leak at Anastomotic Site	3	2
Temporary Dysphagia	0	6
Stricture at Anastomotic Site	1	6
Intestinal Obstruction	0	2
Necrosis of Caecum	1	0
Abdominal Wound Dehiscence and Intestinal Fistula	1	0
Redundant Colonic Loop	0	1
Horners Syndrome	0	1
Supraclavicular Herniation	0	1
Aneurysm of Carotid Artery	0	1
Osteomyelitis of Sternum	0	1
Hoarseness of Voice	0	1

months. In the other two malignancy supervened after a lapse of 12 and 30 years following the ingestion of the corrosive agent.

DISCUSSION

Ingestion of corrosive agents in our series has been found to be mainly amongst estate workers. The triggering factor is often a trivial familial dispute and the lack of adequate familial understanding and support appears to have favoured the patients to resort to this unpleasant misadventure. The racial distribution shows a disproportionately low rate amongst Malays because of their strong religious taboo against suicide.

In the past, oesophageal resection was a controversial procedure, because of the hazards of dissecting out a severely damaged oesophagus. With the advent of better anaesthesia and post-operative care the mortality rate of oesophageal resection is now acceptable. The dysphagia that follows oesophageal resection has been found to be transient and had improved within a few months. This phenomena of temporary dysphagia is attributable to the superficial caustic burns of pharyngeal mucosal lining causing some amount of loss of sensation, resulting in inappropriate deglutition. The dysphagia and regurgitation becomes apparent with liquids and if the patient is initially given solids and dry food this is overcome with gentle persuasion and guidance, most of our patients have gradually relearned the act of deglutition. Anastomotic stricture occurred in six patients (25%) which is unduly high. These patients required periodic dilatation and triamcinolone acetate (Kenacort) injections at the anastomotic site. We feel this high rate of anastomotic stricture is the result of the fibrotic proximal oesophagus, the sequelae of chemical burns.

There is little doubt of a casual relationship between corrosive oesophageal stricture and malignancy. [2] Following oesophageal resection, many of our patients have happily returned to their families and vocation. However some of them may need further psychiatric treatment and social rehabilitation, as there is a risk of reattempting suicide. Two of our patients died; one from liver failure due to phenothiazinc poisoning and another from ingestion of insecticide.

REFERENCES

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