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Current practice

Intubation of gastro-oesophageal malignancies:

A survey of current practice in Britain, 1980

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SUMMARY A postal survey of British endoscopists was carried out to discover current practice in the intubation of gastro-oesophageal malignancies. Forty-six replies were analysed, comprising about 820 intubations. There were 75 perforations (approximately 9%) and the rate was about the same for operators with experience of 20 or more intubations. Tube blockage and dislocation were the main other problems.

In recent years a variety of techniques has been evolved for the placement of tubes through oesophageal and oesophagogastric malignant growths in order to relieve dysphagia. The introduction of such prostheses by endoscopic means has been simplified by a number of innovations, making the procedure increasingly popular as a method of palliation. The Endoscopy Committee of the British Society of Gastroenterology (BSG) requested me to survey current practice in Great Britain.

Method

A postal questionnaire was sent in February 1980 to 127 endoscopists (not necessarily members of the BSG) who were thought likely to be practising endoscopic intubation of malignancies. Questions were designed to elicit quantitative information about current practice and its short-term results. Long-term results are less readily discovered by this type of questionnaire.

Results

RESPONSE

Almost half of those who were approached replied. Of the 60 respondents 14 had not carried out the procedure, leaving 46 replies for further analysis. (Dr Michael Atkinson and Mr Roger Celestin were not approached as their figures have been reported separately).[1–4]

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NUMBER (Table 1)

Figures from a few respondents were estimates rather than precise statistics, but about 820 intubations had been done by the 46 operators, 13 of them having done more than 20. Lesions at any site were tackled by all respondents, though four restricted themselves to adenocarcinomas.

INSTRUMENT (Table 2)

Many respondents used more than one type of introducer, and tried more than one pattern of prosthesis.

ANAESTHESIA

More than half (56%) usually or always used general anaesthesia, but at least three-quarters of these were surgeons. Physicians seemed frequently to do the procedure with sedation and local anaesthesia only.

COMPLICATIONS

Seventy-five perforations were recorded (Table 3), a rate of approximately 9%. Twenty-seven of the 46 respondents had experience of perforations, but analysis of the 'experienced' group (20 or more intubations) revealed an incidence of perforation similar to that of operators who had carried out fewer than 20 intubations. Other reported complications included pulmonary collapse, haemorrhage, septicaemia, pneumonia, gastro-oesophageal reflux, intolerance of tube, stridor, urinary retention, and small bowel perforation. A question specifically related to mortality was not included.

TUBE PROBLEMS (Table 4)

Prosthetic tubes tend to block; there was an incidence of approximately 8%. While one-third of the respondents had experienced no blockage, others reported four or five incidents. The design of the questionary did not allow identification of the makes of tube which blocked. Eight tubes had disintegrated, four of them after irradiation.

About 10% of tubes had dislocated, two-thirds of them upwards. (One which dislocated downwards caused a small bowel perforation.)

Table 1 *Number of intubations performed*

*Intubations**	*Respondents*
1–10	19
11–20	14
21 or more	13

*Total intubations reported: about 820.

Table 2 *Number of respondents using particular models of introducer and tube*

Introducer		*Tube*	
Nottingham	42	Celestin	23
Medoc endoscopic rammer	7	Medoc	12
Medoc mandril set	4	Modified Celestin	16
Rigid endoscope	1	Mousseau-Barbin	2
Foley catheter	1	Gourevitch	1

Table 3 *Perforations*

Perforations	
Immediate	66 } 75≃9%
Late	9 }
None	19 of 46 respondents
'Experienced' group (20+)	45/500=9%
'Inexperienced' group (20)	30/320=9·4%

Table 4 *Number of tube blockages and dislocations*

	Blockages (no.)						
	0	1	2	3	4	5	Not known
Number of respondents	16	6	13	2	3	3	3
	Total 65≃8%						

Tube dislocations (no.)	
Upwards	60 } 87≃10%
Downwards	27 }
Nil	10 of 46 respondents

Table 5 *Overall results of January 1980 questionnaire: 1847 patients (Tytgat 1980)*[4]

Complication	*(%)*
Failure to intubate	2·2
Perforation	8·4
Bleeding	1·2
Pressure necrosis	0·9
Obstruction of prosthesis (food, tumour overgrowth, reflux oesophagitis)	5·0
Tube migration	9·7
Procedure-related death	4·5

Discussion

The results of practical procedures in the hands of enthusiasts are interesting and important, but it is useful and necessary from time to time to discover what methods are being used, and, if possible, what results are being obtained by a range of practitioners.

Tytgat[4] recently reviewed several published series, and gave details of results from other European centres based on a questionnaire sent out in January 1980 (Table 5). Although there is a range of figures, the results are broadly similar to this British survey.

Of particular interest is the perforation rate. It should not be assumed that perforation is synonymous with disaster. Dilatation of these narrow and often necrotic strictures will inevitably lead to perforation on some occasions. This does not preclude completing the insertion of the prosthesis, and with suitable conservative management most patients survive their perforation. The omission of a question on mortality was unfortunate, though in patients with advanced malignant disease it is hard to separate the fatal consequences of a palliative procedure from the inevitable outcome of the disease.

It seems clear that, although endoscopic intubation of inoperable malignancies is easier and probably safer than the surgical insertion of prostheses, there is still room for improvement in technique. Newer designs of prosthetic tubes may make tube dislocation less common, though tube blockage is still likely to occur because of their limited bore. A reduction in perforation rates may depend on different methods—perhaps slower dilatation.

The fact that so many endoscopists are using this technique indicates a clear need for a simple method of palliative intubation of oesophagogastric malignancies, and these results from a large group of operators of varied experience will be considered encouraging.

I am grateful to Dr P B Cotton (Endoscopy Vice-President) and the Endoscopy Committee of the British Society of Gastroenterology, for their encouragement and help, and to the endoscopists who responded to my questions so thoroughly. Mrs M Thomson and Mrs P Milner uncomplainingly did all the secretarial work.

References

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