## **PATIENT PROFILE**

The age of all patients who underwent OGD is presented in Figure 16. 61% (493/809) were aged 70 years or older and 60% (485/809) were male.

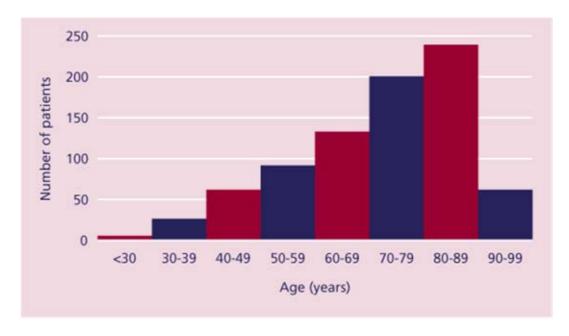


Figure 16. Age profile of patients undergoing OGD procedure

The diagnoses providing the reason for OGD, which were analysed from assessment of the free text for the procedure performed, are presented in Table 48.

Table 48. The reason for OGD			
Diagnosis		Total	(%)
Variceal disease		355	(44)
Ulcer		163	(20)
Stricture	Malignant	165	(20)
	Benign	119	(15)
Polyp		5	(<1)
Sub-total Sub-total		807	
Not answered		2	(<1)
Total		809	

The commonest diagnosis, 44% (355/807), was of variceal disease and in only 20% (163/807) was there a diagnosis of ulcer. This was surprising as ulcer disease is very common, and bleeding ulcers are more common than varices<sup>1</sup>. However, it suggests that patients with bleeding ulcers are more likely to survive compared with those who suffer variceal haemorrhage. This may reflect the severity of shock associated with variceal haemorrhage and the associated comorbidity, particularly hepatic disease<sup>1</sup>.

The complications or events that occurred within 30 days of the procedure are presented in Table 49.

Table 49. Complications after therapeutic upper GI endoscopy (answers may be multiple)				
Complication	Total n = 740			
Progress of medical condition	203			
Respiratory problems	175			
Haemorrhage	141			
Cardiac problems	111			
Renal failure	81			
Hepatic failure	67			
Sepsis	45			
Subsequent related surgery	30			
Haematological problems	30			
Electrolyte imbalance	25			
Viscus perforation	21			
Stroke	14			
Total	850			
None	93			
Not answered	69			

This shows that, other than the progress of the medical condition, the most common complications were respiratory problems 21% (175/850), haemorrhage 17% (141/850) and cardiac problems 13% (111/850). These data are similar to previous studies that have shown cardio-respiratory complications to be the most prominent<sup>4 5</sup> following both therapeutic and diagnostic upper GI endoscopy. The complications of viscus perforation and haemorrhage and the need for surgery may be related to the procedure, and these are presented in Table 50.

Table 50. Procedure versus operative complication (answers may be multiple)						
Procedure (total performed)	Perforation	Haemorrhage	Surgery	Total n = 809		
Snare (5)	1	0	1	2		
Coagulation (104)	0	23	6	29		
Laser (9)	0	1	0	1		
Sclerosis (400)	1	71	15	87		
Banding (41)	0	6	0	6		
Dilation (125)	15	5	0	20		
Stenting (259)	4	35	8	47		
Total	21	141	30	192		

The techniques used to secure haemostasis were argon/plasma coagulation, laser treatment, injection with either adrenaline or sclerosing agents, or banding, or a combination of these techniques. Most were used appropriately and followed BSG guidelines<sup>23</sup>. However, in a number of patients with bleeding oesophageal varices adrenaline was injected into either the oesophageal mucosa and /or the adjacent varix in an attempt to control bleeding, which is not recommended in the UK guidelines of management of variceal haemorrhage<sup>2</sup>.

Although continued or recurrent haemorrhage can occur after haemostatic attempts with either argon/plasma coagulation (22%, 23/104), or sclerotherapy (18%, 71/400), or banding (15%, 6/41), there appeared to be a surprisingly high incidence following stenting (14%, 35/259).

The following case illustrates that repeat endoscopy can be indicated, and the fact that different pathologies can co-exist.

## **Case Study**

A young patient with known cirrhosis presented with haematemesis. The pre-endoscopy management was exemplary. Subsequent endosopy revealed bleeding varices, which were banded. The patient received terlipressin, but continued to bleed. A further endoscopy 12 hours later confirmed that the treated varices were not bleeding, but there was a haemorrhage from a duodenal ulcer. Despite surgical intervention the patient continued to bleed, and died from disseminated intravascular coagulation.