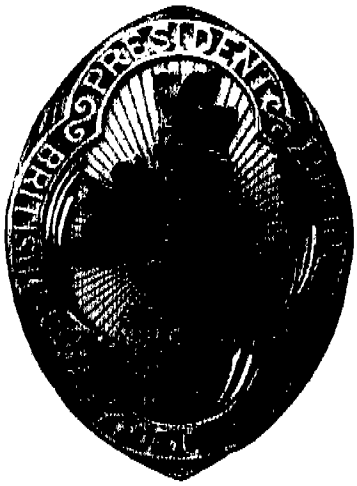
The British Society of Gastroenterology Audit on ERCP
Availability Quality and Outcomes.

PROFORMA 3: PROCEDURE QUESTIONNAIRE



PROFORMA SHOULD BE COMPLETED FOR:
All patients age 18 or over attending for ERCP
ERCP defined as any procedure where an endoscope is inserted with the intention of cannulating the pancreatic duct, bile duct or both. Patients listed for stent removal without attempted cannulation need not be included.

QUERIES AND COMPLETED FORMS SHOULD BE ADDRESSED TO
Dr. Earl Williams, Research Fellow, Dept. of Clinical Information, 4th Floor Linda McCartney Building, Royal Liverpool University Hospital, Prescot St., L7 8XP.
Tel 0151 7063794, Fax 0151 7062313
Email Earl.Williams@rlbuht.nhs.uk

THANKYOU

The British Society of Gastroenterology Audit on ERCP

PROFORMA 3: Procedure questionnaire - to be completed at time of ERCP

Instructions

1.Inclusion criteria: ALL patients age 18 or over attending for ERCP

2.ERCP defined as any procedure where an endoscope is inserted with the intention of cannulating the pancreatic duct, bile duct or both. Patients listed for stent removal without attempted cannulation need not be included.

3.Note in emergency cases where patient too sick to consent prior to procedure consent will need to be obtained retrospectively before forwarding a questionnaire to Liverpool. Where patient is indefinitely incapable of consenting exclude.

4.Endoscopist should answer questions in Section 1

5.Where a patient experiences an adverse event during procedure or immediate recovery period section 2 should be completed by endoscopist performing procedure. In this context an adverse event is defined as a detrimental deviation from the patient's expected clinical course occurring at ERCP or shortly (<4hours) afterwards. Where an adverse event occurs>4 hours after ERCP or proforma 3 is unavailable to reporting doctor use proforma 4 to record details. Where an adverse event is recorded the chief investigator will contact unit at 30 days to establish outcome.

6.To answer a question place a cross in one box only using black pen. i.e. ☒
If a question is labelled multiple response you may cross as many boxes as appropriate. Where a number or text is required print your response, keeping within the squares, if present. You do not need to prefix numbers with zero i.e. answer 3 rather than 003.

7.If you make a mistake block the box out entirely (and if necessary write correct text or number adjacent to box)

QUERIES AND COMPLETED FORMS SHOULD BE ADDRESSED TO
Dr. Earl Williams, Research Fellow, Dept. of Clinical Information, 4th Floor Linda McCartney Building, Royal Liverpool University Hospital, Prescot St, L7 8XP.
Tel 0151 7063794, Fax 0151 7062313
Email Earl.Williams@rlbuht.nhs.uk

SECTION 1: TO BE COMPLETED BY ENDOSCOPIST

IDENTIFYING CODES - IMPORTANT,PLEASE COMPLETE FULLY

1. Hospital Code ☐☐☐

Date of ERCP ☐☐ / ☐☐ / ☐☐

Patient's Hospital Number ☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Patients Date Of Birth ☐☐ / ☐☐ / ☐☐

Patients Sex ☐ Male ☐ Female

2.For each endoscopist involved in the procedure insert their code against the description that best describes their role.If you don't know an endoscopist's code ring 0151 706 3794 or speak to your consultant lead

Code	Role during Endoscopy
☐☐☐	**Independent** (ie. performed procedure without other endoscopist present to advise or assist)
☐☐☐	**Not independent** (ie. other endoscopist in room to provide advice or assistance)
☐☐☐	**Supervising** (i.e present to provide advice or assistance to trainee/other endoscopist.) Indicate level of help you gave during this ERCP: (multiple response)

- ☐ Verbal instruction
- ☐ assisted or performed cannulation (include precut)
- ☐ assisted or performed post cannulation procedures
- ☐ No help required by other endoscopist/trainee

LOCATION

3.The ERCP was performed in

☐ XRay ☐ Theatres

☐ Endoscopy ☐ Other Imaging suite

DRUGS AND MONITORING

4.Was General Anaesthesia Used?

☐ No **Go to question 5**

☐ Yes. Specify Reason: ☐☐☐☐☐☐☐☐☐☐ **Now Go to question 7**

5. During procedure: (multiple response)

- ☐ pulse oximetry was used
- ☐ automated BP monitoring was used
- ☐ ECG monitoring was used

6.Indicate medication given during ERCP: (multiple response)

Routinely Used Drugs	Total Dose by end of ERCP
☐ Midazolam	☐☐.☐ mg
☐ Diazepam	☐☐.☐ mg
☐ pethidine	☐☐☐ mg
☐ fentanyl	☐☐☐ mcg
☐ propofol	☐☐☐ mg
☐ nalbuphane (nubaine)	☐☐ mg
☐ buscopan	☐☐ mg
☐ GTN	☐☐ mg
☐ lignocaine spray	
☐ oxygen	

Antibiotic (If Used)

- ☐ Antibiotics according to unit protocol
- ☐ Antibiotics (individualised regimen)

Reversal Agents/Additional Drugs Required

☐ flumazenil	☐☐☐ mcg
☐ naloxone	☐☐☐ mcg
☐ glucagon	☐☐ mg
☐ atropine	☐.☐ mg
☐ Other,specify: ☐☐☐☐☐☐☐☐☐☐	☐☐.☐ mg/mcg

PATIENT INFORMATION

7.Was the patient admitted as a daycase ie. in absence of adverse event expected to go home within 24 hours of arrival?

☐ yes ☐ no

8.What was the degree of urgency?

☐ Elective (at time to suit both clinician and patient)

☐ Scheduled (early ERCP but not immediately life saving)

☐ Urgent (as soon as possible after resuscitation)

☐ Emergency (immediate ERCP with simultaneous resuscitation)

9.What was the ASA Grading of patient immediately prior to ERCP?

☐ Class I. Healthy patient with localised pathology requiring ERCP

☐ Class II. Mild systemic disease e.g. non limiting heart disease, controlled diabetes,hypertension,obesity

☐ Class III. Severe systemic disease. Definite functional limitation e.g. Brittle diabetic,frequent angina, MI>3 months ago

☐ Class IV. Severe systemic disease with acute/unstable symptoms e.g. MI within last 3/12,organ failure,uncontrolled asthma

☐ Class V. Moribund. Submitted to therapy as act of desperation

10. Indicate if the patient has been on any of the following medication in the last 3 days (multiple response)

☐ Oral anticoagulant

☐ NSAID (include aspirin=>300mg per day)

☐ Heparin (any form or dose)

☐ Antiplatelet treatment (include aspirin<300mg/day)

11.Indicate if the patient's medical history includes (multiple response)

☐ Cirrhosis, definite or suspected

☐ Ongoing haemodialysis

☐ Currently obese (BMI>30 - see definitions)

12.Indicate if the patient's surgical history includes (multiple response)

☐ Previous Cholecystectomy

☐ Previous Bilroth II

☐ Whipples or Roux en Y procedure

13.The patient's ERCP was

☐ Their 1st ERCP **Go To question 15**

☐ A repeat procedure planned at the time of their last ERCP

☐ A repeat procedure unplanned at the time of their last ERCP

14.Indicate if the patient has history of (multiple response)

☐ Post ERCP pancreatitis

☐ Previous biliary sphincterotomy

☐ ERCP performed in the last 3/12

15. Indicate if todays ERCP (multiple response)

☐ Involved a combined percutaneous/endoscopic approach

☐ Is part of extracorporeal shock wave lithotripsy treatment

PRIOR INVESTIGATION AND INDICATION

16. What symptoms/findings have prompted further investigation of the patient (multiple response):

- ☐ Jaundice
- ☐ Abdominal Pain
- ☐ Fever/Signs of sepsis
- ☐ Weight Loss
- ☐ Abdominal Mass
- ☐ Abnormal LFTs
- ☐ Abnormal Radiology
- ☐ Other, specify

17. Indicate the results of any investigations that the patient has had in the last 3 months. If the patient has had a test duplicated in the last 3 months then report the result of the most recent (multiple response):

	Normal	Abnormal
Trans-Abdominal Ultrasound (USS)	☐	☐
Computed Tomography	☐	☐
Magnetic Resonance Cholangio-Pancreatography	☐	☐
Endoscopic Ultrasound	☐	☐
Percutaneous Trans-hepatic Cholangiography	☐	☐
Intra-Operative Cholangiography	☐	☐

18. If you have indicated that the patient has had an abnormal USS, does the report identify:

multiple response

- ☐ Dilated common bile duct
- ☐ Intraductal stone(s)
- ☐ A pancreatic mass
- ☐ Other abnormality,specify

19. If the patient has had blood tests in the last 7 days document the most recent available results (multiple entry)

PT ☐☐.☐ **s**

or

INR ☐☐.☐

WCC ☐☐.☐ **000 per mm3**

Platelets ☐☐☐ **000 per mm3**

Albumin ☐☐.☐ **g/ L**

Bilirubin ☐☐☐ **mM**

Creatinine ☐☐☐ **mcM**

20. What was your suspected diagnosis <u>BEFORE</u> ERCP was performed (multiple response)

- ☐ Intra ductal stones
- ☐ Sphincter of Oddi Dysfunction/Functional pain
- ☐ Acute Cholangitis - Unresolved at time of ERCP
- ☐ Acute Cholangitis - Resolved by time of ERCP
- ☐ Malignancy-Unspecified
- ☐ Carcinoma of Pancreas
- ☐ Cholangiocarcinoma
- ☐ Acute Pancreatitis - Unresolved at time of ERCP
- ☐ Acute Pancreatitis - Resolved by time of ERCP
- ☐ Chronic Pancreatitis
- ☐ Benign Extra-Hepatic Stricture
- ☐ Biliary Leak
- ☐ Primary Sclerosing Cholangitis
- ☐ Stent dysfunction
- ☐ Unknown
- ☐ Other,Specify

PRE-PROCEDURE INTENT AND CANNULATION

21. Which ducts did you intend to cannulate BEFORE starting the ERCP

☐ Common Bile Duct (ie. cholangiogram via main papilla)

☐ Main Pancreatic Duct (ie. pancreatogram via main papilla)

☐ Accessory Duct (ie. pancreatogram via minor papilla)

22.BEFORE starting the ERCP did you expect to perform any of the following procedures? (multiple response)

A. STENT REMOVAL

☐ Remove Biliary Stent currently insitu

B. SPHINCTEROTOMY

☐ Biliary Sphincterotomy

☐ Pancreatic Sphincterotomy

C. STONE EXTRACTION

☐ Common Bile Duct Stone Extraction

☐ Intrahepatic Duct Stone Extraction

☐ Pancreatic Duct Stone Extraction

D. STENT INSERTION

☐ Common Bile Duct Stent Insertion

☐ Hilar/Intrahepatic Bile Duct Stent Insertion

☐ Pancreatic Duct Stent Insertion

E. BALLOON DILATATION

☐ Balloon Dilatation of papilla

☐ Balloon Dilatation of CBD

☐ Intra-Hepatic Biliary Duct Dilatation

☐ Pancreatic Duct Dilatation

F. DRAIN INSERTION

☐ Nasobiliary Drainage

☐ Nasopancreatic Drainage

G. HISTOLOGY,CYTOLOGY AND SAMPLING

☐ Biopsy (of ampulla or duct)

☐ Brush Cytology of Bile Duct

☐ Brush Cytology of Pancreatic Duct

☐ Sampling

H. SPHINCTER OF ODDI MANOMETRY

☐ Manometry

I. OTHER PROCEDURES

☐ Other specify

23. Was the ampulla successfully visualised?

☐ Yes

☐ No,unable to intubate oesophagus

☐ No, pyloric stenosis present

☐ No, specify other reason if identified

if No go to question 34,page 7

24.What was the ampullary appearance?

☐ Normal

☐ Patulous/Gaping

☐ Bulging

☐ Tumour

☐ Within or on edge of diverticulum

☐ Adjacent to diverticulum

☐ Other, specify

25. What were the total number of cannulations / cannulation attempts during procedure (Defined as each episode of contact with major or minor papillae by any endoscopist using any device and including each recannulation but excluding over the wire exchanges)

☐☐

26. Was a PRECUT papillotomy required?

☐ Yes ☐ No

27. Was there visible intramucosal injection during ERCP?

☐ yes ☐ no

28 .Indicate total number of times contrast (of any volume) injected into the pancreatic duct during ERCP

☐☐

FINDINGS AND POST-CANNULATION INTENT

29. INDICATE WHICH DUCTS WERE CANNULATED AND SUBSEQUENT FINDING:

☐ **No ducts cannulated - Go To Question 33 (page 7)**

☐ **Common Bile duct cannulated - specify cholangiogram findings: (Multiple response)**

☐ Insufficient cannulation or contrast injected

☐ Normal

☐ Dilated common bile duct (>10mm corrected for magnification)

☐ Bile duct leak

☐ Suspected sclerosing cholangitis

☐ Stones within gall bladder

☐ Probable or definite bile duct stones,specify location and size:

Location(s) ☐ extrahepatic ☐ intrahepatic ☐ cystic duct

Size ☐ largest<1cm ☐ largest>=1cm

Number ☐ <3 ☐ >=3

☐ Probable or definite bile duct stricture(s), specify location/type:

Location(s) ☐ distal to hilum ☐ hilum or above ☐ both

Type: ☐ Benign ☐ Malignant ☐ Indeterminate

☐ Other,specify:

☐ **Pancreatic duct and/or ☐ Accessory duct cannulated - specify pancreatogram findings: (Multiple response)**

☐ Normal

☐ Insufficient cannulation or contrast injected

☐ Pancreatic divisum

☐ Probable or definite stones

☐ Dilated (corrected diameter>6mm within head or >3mm within tail)

☐ Acinirization (ie.blush of pancreatic parenchymal contrast)

☐ Definite chronic pancreatitis (Cambridge criteria-see definitions):

☐ Main duct irregularity/dilatation ☐ >3 side branches abnormal

☐ Probable or definite stricture,specify type:

☐ Malignant ☐ Benign ☐ Indeterminate

☐ Other, specify:

30. In light of cholangiogram/pancreatogram/ampullary findings:

☐ I intended to perform procedures as listed in question 22– **Go To Q 32**

☐ No further procedure was required as part of this ERCP– **Go To Q 33,page 7**

☐ My intent as indicated in question 22 was altered

31.Specify what your intent was FOLLOWING CANNULATION (multiple response)

A. STENT REMOVAL

☐ Remove Biliary Stent currently insitu

B. SPHINCTEROTOMY

☐ Biliary Sphincterotomy

☐ Pancreatic Sphincterotomy

C. STONE EXTRACTION

☐ Common Bile Duct Stone Extraction

☐ Intrahepatic Duct Stone Extraction

☐ Pancreatic Duct stone extraction

D. STENT INSERTION

☐ Common Bile Duct Stent Insertion

☐ Hilar/Intrahepatic Bile Duct Stent Insertion

☐ Pancreatic Duct Stent Insertion

E. BALLOON DILATATION

☐ Balloon Dilatation of Papilla

☐ Balloon Dilatation of CBD

☐ Intra-Hepatic Biliary Duct Dilatation

☐ Pancreatic Duct Dilatation

F. DRAIN INSERTION

☐ Nasobiliary Drainage

☐ Nasopancreatic Drainage

G. HISTOLOGY,CYTOLOGY AND SAMPLING

☐ Biopsy (of ampulla or duct)

☐ Brush Cytology of Bile Duct

☐ Brush Cytology of Pancreatic Duct

☐ Sampling

H. SPHINCTER OF ODDI MANOMETRY

☐ Manometry

I. OTHER PROCEDURES

☐ Other specify

ATTEMPTED PROCEDURES AND OUTCOME

32. Fill in sections A-I (page s 6 and 7) as appropriate.List all attempted procedures and also indicate if attempted procedure was completed according to definitions given in each box. If no procedures were attempted go straight to question 33 on page 7

32A. STENT REMOVAL

Stent removal attempted

☐

Stent removal completed*

☐

***DEFINITION OF COMPLETED: stent removed from biliary tree/pancreatic duct**

32B. SPHINCTEROTOMY

Type(s) attempted

☐ Bile Duct Sphincterotomy

☐ Pancreatic Duct Sphincterotomy

Indicate type of current setting

☐ Pure cutting current throughout

☐ Blended current for all or part of procedure(s)

☐ ERBE/Endocut device used

Indicate if length of (the externally visible) cut was >5mm for the

☐ Bile Duct Sphincterotomy

☐ Pancreatic Duct Sphincterotomy

Indicate if sphincterotome introduced over wire (ie. wire guided procedure) for the

☐ Bile Duct Sphincterotomy

☐ Pancreatic Duct Sphincterotomy

Indicate if Visible bleeding at end of procedure was >5mls as a result of the

☐ Bile Duct Sphincterotomy

☐ Pancreatic Duct Sphincterotomy

Of sphincterotomies attempted the following were completed*

☐ Bile Duct Sphincterotomy

☐ Pancreatic Duct Sphincterotomy

***DEFINITION OF COMPLETED: Where subsequent procedures requiring access to duct (eg stent insertion/stone extraction) were attempted these were also completed. Where no subsequent procedures were attempted operator judges whether sphincerotomy successfully completed or not.**

32C. STONE EXTRACTION

Attempted stone extraction from the:

☐ Common Bile Duct

☐ Intra-Hepatic Ducts

☐ Pancreatic Duct

Devices used during attempted stone extraction

☐ Balloon

☐ Basket

☐ Mechanical lithotripsy

☐ Other,specify ☐

Attempted extraction completed* from the

☐ Common Bile Duct

☐ Intra-Hepatic Ducts

☐ Pancreatic Duct

***DEFINITION OF COMPLETED:Duct CLEARED of suspected stones (no residual stones)**

32D. STENT INSERTION

Location(s) where placement was attempted

☐ Common Bile Duct

☐ Hilum/Intra Hepatic Duct

☐ Pancreatic Duct

Location(s) where attempts were completed*

☐ Common Bile Duct

☐ Hilum/Intra Hepatic Duct

☐ Pancreatic Duct

Type(s) of Stent in situ at end of procedure

1. ☐ plastic pigtail ☐ plastic straight ☐ metal
   length (cm) ☐☐ Diameter ☐☐ mm/Fr
2. ☐ plastic pigtail ☐ plastic straight ☐ metal
   length (cm) ☐☐ diameter ☐☐ mm/Fr

***DEFINITION OF COMPLETED:stent within duct with top of stent above selected pathology and bottom outside papilla**

ATTEMPTED PROCEDURES AND OUTCOME

32E. BALLOON DILATATION

Dilatation attempted in the following location(s)

☐ At papilla

☐ Within common bile duct

☐ Within intrahepatic ducts

☐ Within Pancreatic Duct

Attempted dilatation completed* in the following location(s)

☐ At papilla

☐ Within common bile duct

☐ Within intrahepatic ducts

☐ Within Pancreatic Duct

***DEFINITIONOF COMPLETED: able to insert balloon across selected stricture and inflate**

32F. DRAIN INSERTION

Insertion of following attempted

☐ Nasobiliary drain

☐ Nasopancreatic drain

Attempted insertion of the following completed*

☐ Nasobiliary drain

☐ Nasopancreatic drain

***DEFINITIONOF COMPLETED:Drain inserted with distal tip above any obstructing lesion /stone**

32G. HISTOLOGY,CYTOLOGY AND SAMPLING

Following attempted

☐ Biopsy (of ampulla or duct)

☐ Brush cytology of bile duct

☐ Brush cytology of pancreatic duct

☐ Sampling

Of those attempted following completed*

☐ Biopsy (of ampulla or duct)

☐ Brush cytology of bile duct

☐ Brush cytology of pancreatic duct

☐ Sampling

***DEFINITION OF COMPLETED:operator judges adequate specimens taken**

32H. SPHINCTER OF ODDI MANOMETRY

Manometry attempted

☐

Where attempted manometry completed*

☐

***DEFINITIONOF COMPLETED: trace assists in diagnosis**

32I. OTHER PROCEDURES

Attempted

☐

Indicate if you judged procedure successfully completed

☐

Specify procedure:

OUTCOME

33. Total volume of contrast injected by end of ERCP ☐☐☐ **mls**

34. At start of ERCP was there complete biliary obstruction

☐ No

☐ Yes **If yes was this obstruction relieved:** ☐ no ☐ yes

35 .Did the patient experience any adverse event during ERCP

☐ Yes **Fill in section 2 (NEXT PAGE)**

☐ No **USE QUESTION 36 TO ENTER ANY FURTHER COMMENTS YOU FEEL ARE NECESSARY AND FORWARD COMPLETED FORM TO ADDRESS ON PAGE 1**

36. PLEASE USE THIS SPACE IF YOU NEED TO CLARIFY A RESPONSE

50115

SECTION 2: TO BE COMPLETED IF ADVERSE EVENT NOTED IN ENDOSCOPY ROOM OR RECOVERY

1.Onset of symptoms/signs (of adverse event) relative to ERCP

☐ Pre-procedure (from starting preparation)

☐ During Procedure (in endoscopy room)

☐ Early recovery (<4 hours after ERCP)

2.Nature of adverse event
(for each section a-g you may cross more than one box)

a.Events relating to medication given at time of procedure and sufficient to alter aftercare or require specific treatment:

☐ Generalised allergic reaction (rash +/- any of below)

☐ Wheezing

☐ Hypoxia

☐ Hypertension

☐ Hypotension

☐ Neuropsychiatric reaction

☐ Reaction at IV Site

b. Recognized Local Complications of ERCP,sufficient to alter aftercare or require specific treatment :

☐ Perforation, suspected or definite

☐ GI bleeding

☐ Basket impaction

☐ Other Equipment failure or malfunction,specify:

c.Other events following ERCP sufficient to alter aftercare or require specific treatment:

☐ Abdominal pain of uncertain origin

☐ Chest pain of uncertain origin

☐ Unstable coronary syndrome/Myocardial infarct

☐ Cardiac arrythmia

☐ Cerebro-Vascular Accident/Stroke

d. Other event or diagnosis that altered aftercare or required specific treatment

e.Indicate if as a result of adverse event(s):

☐ ERCP was not started

☐ ERCP was stopped prematurely

f.Change in aftercare as result of event(s):

☐ None

☐ Extra consultation eg in outpatient or endoscopy recovery

☐ Planned discharge cancelled - patient to stay in

☐ Extra treatment required in pre-existing inpatient

☐ Admission to ITU

g. Medical interventions received or planned at time of writing as result of event(s):

☐ Reversal agents (flumazenil or naloxone)

☐ Atropine

☐ Oxygen

☐ Transfusion <5 units

☐ Transfusion> or equal to 5units

☐ Ventilatory assistance eg bag and mask

☐ Tracheal intubation

☐ Crash call

h.Other(invasive) interventions received or planned at time of writing as result of event(s):

Endoscopic

Radiological/Percutaneous

Surgery

Other

3. Outcome at time of writing (cross one box):

☐ Unknown as yet

☐ Full recovery

☐ Permanent disability/loss of function expected

☐ Death

Date ☐☐ / ☐☐ / ☐☐

Cause of death Ia

Ib

II

Thankyou - please forward to Dr Earl Williams at address shown on page 1

DEFINITIONS

Complications - Definitions for questionnaire (Cotton, Lehman et al. 1991) , (Cotton 1994)

Complication	Mild	Moderate	Severe	Fatal
Bleeding	Clinical (not just endoscopic) evidence of bleeding; HB drop <3g; no transfusion	Transfusion (4U or less), no angiographic or surgical intervention	Transfusion (5U or more) or intervention (angiographic or surgical)	Results in death
Perforation	Possible or slight leak of contrast; treated by fluids & suction for 3 days or less	Any definite perforation treated medically for 4-10 days	Hospitalisation for >10 days or any intervention (percutaneous or surgical).	Results in death
Pancreatitis (*Abdo pain + amylase >3N after 24 hrs*)	requiring admission or prolongation of planned admission beyond 48 hrs	requiring of 4-10 days hospitalisation	admission > 10 days; haemorrhagic pancreatitis; pseudocyst; intervention required	Results in death
Infection (cholangitis)	>38 ^{0}C 24-48 hrs	Febrile or septic illness requiring >3 days hospitalisation or endoscopic/percutaneous intervention	Septic shock or surgery	Results in death
Miscellaneous (*include symptomatic IHD,aspiration pneumonia,drug reactions)*	Onset of relevant symptoms within 3days of ERCP. Requires 1-3 days hospitalisation/ prolongation of stay	Onset of relevant symptoms within 3 days of ERCP. Requires 4-10 days hospitalisation	Onset of relevant symptom within 3 days of ERCP. Requires >10days hospitalisation *or* ITU *or* surgical/radiological intervention	Results in death

Chronic Pancreatitis: Cambridge Classification

Terminology	Main duct	Abnormal side branches	Additional features
normal	normal	none	
equivocal	normal	<3	
mild	normal	3 or more	
moderate	abnormal	>3	
marked	abnormal	>3	One or more of: large cavity;obstruction;filling defects;severe dilatation or irregularity

Chart Depicting body weight to height ratio.

■ = OBESE