How to teach ERCP … in 2018 ?

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BILIO-PANCREATIC ENDOSCOPY/ THERAPY

- **ERCP**
- EUS
- MRI

- Interventional radiology
- Surgery

POST-ERCP COMPLICATIONS AND ENDOSCOPIST'S CASE VOLUME

	<1 EBS/wk	>1 EBS/wk	
Difficult cannulation	14.6%	7.1%	p<0.001
N° of MPD injections	2.1%	1.4%	p<0.001
Failures or drainage	5.4%	1.2%	p<0.001
Hemorrhage	2.9%	1.1%	p<0.002
Severe complications	2.3%	0.9%	p=0.01
All complications	11.1%	8.4%	p=0.03

Complications	Pancreatitis	Any
SOD	19,1%	21,7%
CBD stones before or after cholecystectomy	2,8%	4,9%

Freeman et al, NEJM 1996

MAIN FACTORS TO CONSIDER: LOW VOLUME (AND UNAPPROPRIATE TRAINING, ONGOING ACTIVITY)

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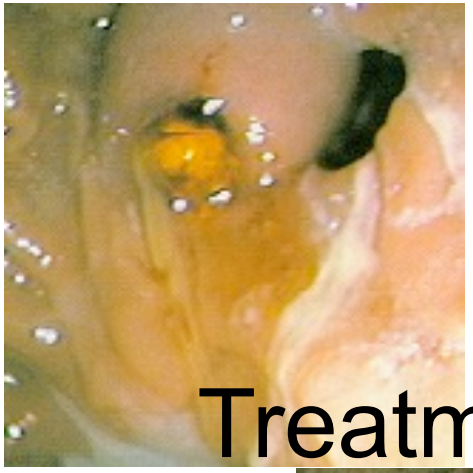
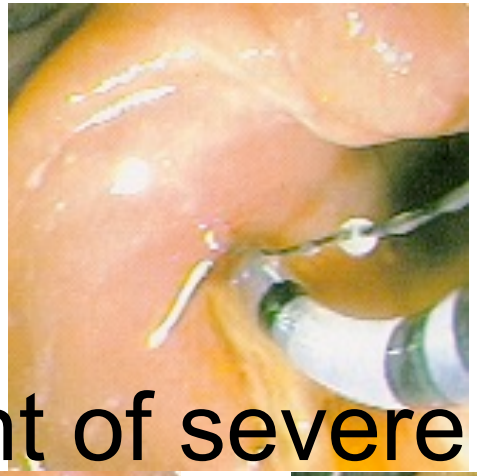
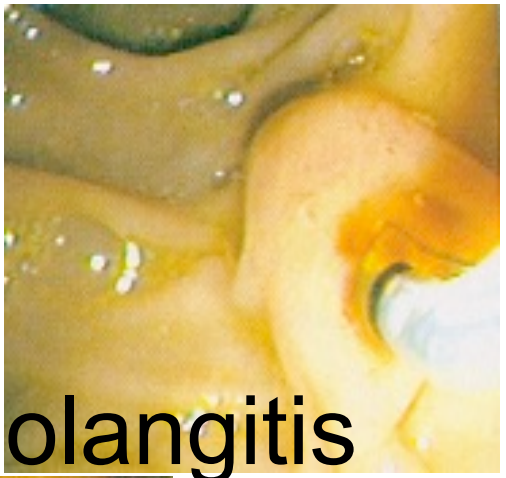
- Decreases success
- Reduces appropriate management
- Increases complications
- Increases deaths

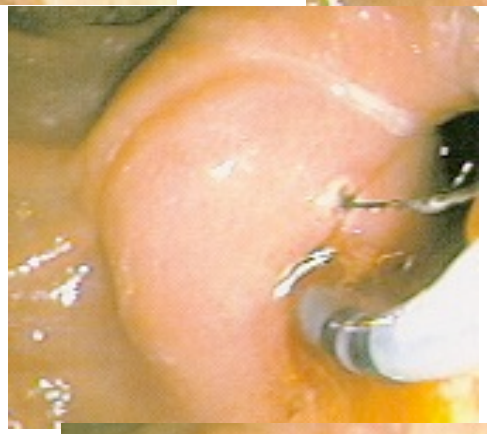
ERCP is 20 times more dangerous than standard endoscopic procedures

Faulx et al, GIE 2017
Freeman et al NEJM 1996
Cote GA et al Med Care 2013

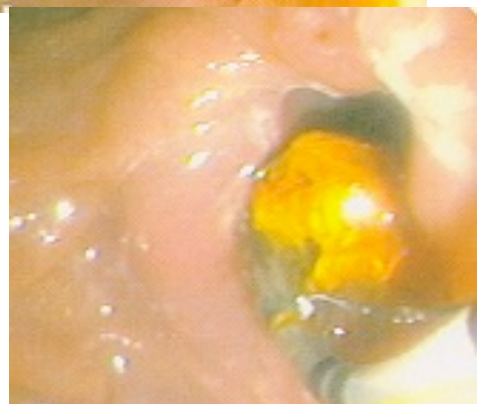
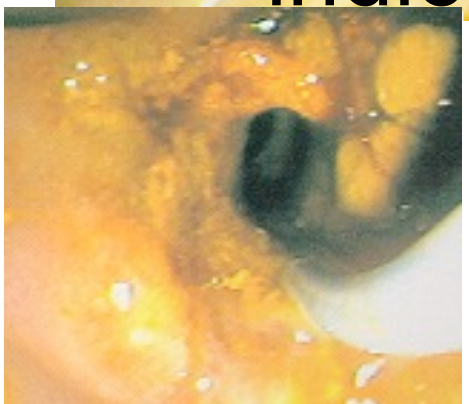
There are 2 levels of therapeutic ERCP

Treatment of severe cholangitis




And all the other indications

TEACHING ERCP

- Numbers…..
- HOW ? By whom ?
- Who? Selection and success criteria
- Assessment
- And in 2018, Is ERCP enough ?

NUMBERS?

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Competency outcomes of included studies		
Study	Competency marker	Competency results
Pancreatic duct cannulation		
Jowell et al[7]	80%	Achieved by 160 ERCPs
Watkins et al[12]	85%	Achieved by 70 ERCPs
Selective duct cannulation		
Schlup et al[13]	90%	Achieved by 120–150 ERCPs
Biau et al[14]	90%	Achieved by 79–300 ERCPs
Kowalski et al[15]	80%	Achieved by 180 ERCPs
Vitale et al[16]	85%	Achieved by 102 ERCPs
Waller et al[18]	80%*	Achieved by 100 ERCPs
Common bile duct cannulation		
Jowell et al[7]	80%	Not achieved by 200 ERCPs
Watkins et al[12]	85%	Not achieved by 100 ERCPs
Verma et al[17]	80%*	Achieved by 350 – 400 ERCPs
Ekkelenkamp et al[19]	80%	Achieved by 160 ERCPs

Shahidi N et al GIE 2015; 81; 1335

NUMBERS ?

- « Trainees must perform a total of 200 unassisted ERCPs in patients with intact papilla including > 80 ES and >60 stents » (ASGE Guidelines 2017)
- 90 % of fellows are involved in < 100 ERCPs at the end of training
- Advanced training and selection mandatory
- Realistic numbers ? Case selection in large centers, teaching precut….
- Independant, Unassisted or Completed ?
- And the environment (nurse, technician, anesthesy)?


COOK
KYOKO

HOW? BY WHOM
PERFORMING ERCP WITH A CLEAR INDICATION

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- ERCP has become a therapeutic procedure only
- MRCP and EUS has largely replaced diagnostic ERCP
- Should be performed when there is a clear therapeutic aim
  - Biliary stone extraction
  - Malignant biliary obstruction
  - Biliary stricture investigation and stenting
  - Biliary leaks
  - Treatment for pain in patients with chronic pancreatitis and strictures/stones
  - Pancreatic duct drainage in patients with recurrent AP and duct changes
  - Investigation and stenting for indeterminate pancreatic duct strictures

- Indeterminate abdominal pain and the (in)famous SOD type III
- Routine ERCP with BS before cholecystectomy
- Routine biliary drainage in resectable malignancy with surgery scheduled in less than 2 weeks and no jaundice

Adler, Quality indicators in ERCP, Am J Gastro 2013

HOW ? BY WHOM ?
THE TRAINER

- Competency
- Willingness to do it
- Time to spend and invest
- Working as a team
- Able to put words on what he does
- Willing to discuss the indications
- Not afraid about some additional difficulties (but protecting the patient / timing is not enough)

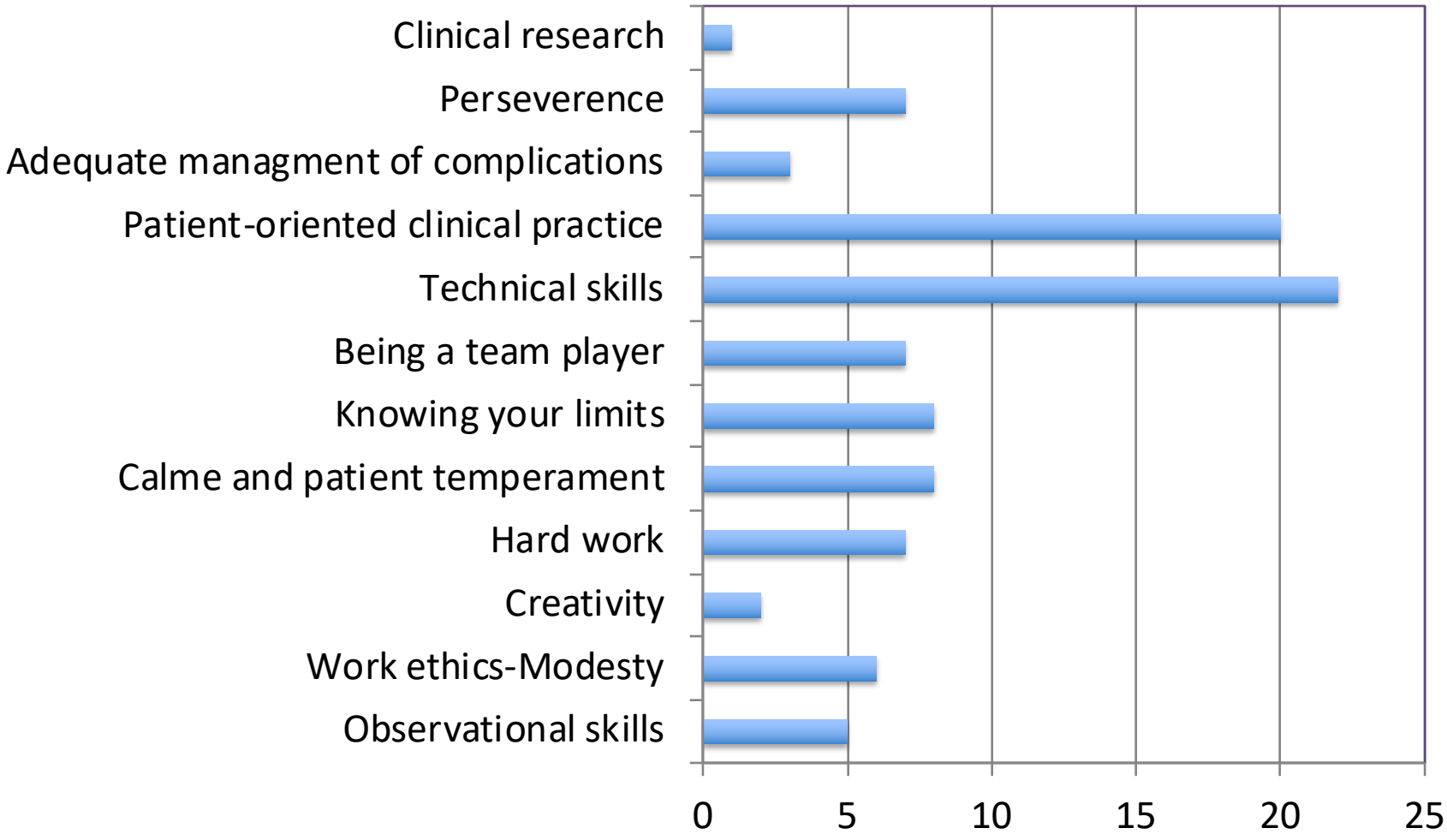
Performing an ERCP is an opportunity to analyze the clinical history of a patient and to propose a management plan (Michel Cremer)

WHO ? SELECTION CRITERIA FOR TRAINEES

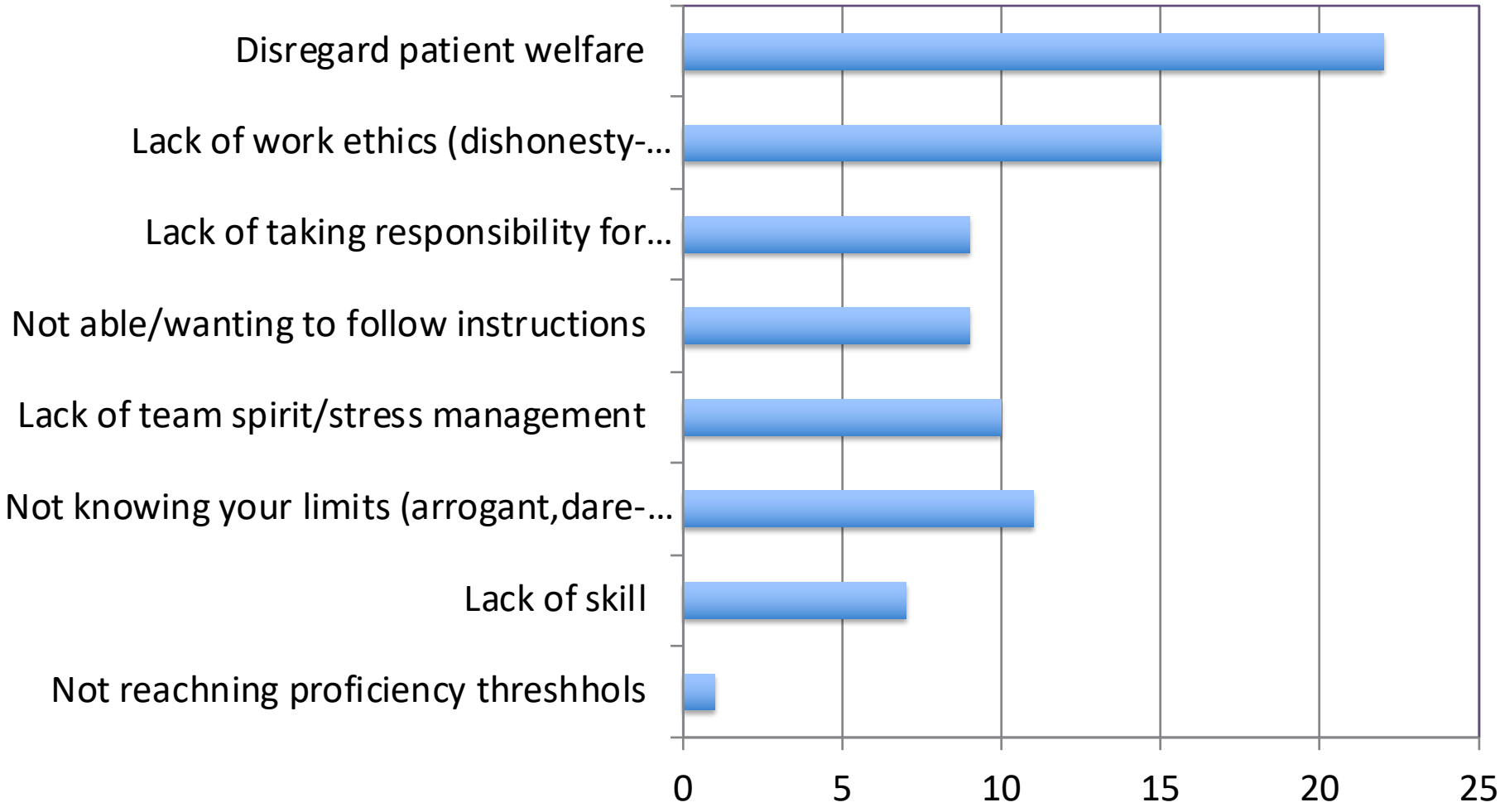
- Questionnaire sent by e-mail to 60 trainers (heads of training programs) from Europe, US, Asia
  - 3 most important qualities for training in advanced endoscopy
  - 3 reasons to disqualify a trainee from an advanced endoscopy training program
  - Define clinical judgement and skills

- 33 answers (55%)

QUALITIES FOR EXCELLING IN ADVANCED TRAINING IN ENDOSCOPY



REASONS FOR DISQUALIFYING A FELLOW FROM AN ADVANCED ENDOSCOPY PROGRAM



WHAT IS TECHNICAL SKILL IN ENDOSCOPY…?

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- “Precision and hand-eye coordination”
- “Knowing how to fully use the endoscope and its degrees of liberties –Up/down, left/right, pull/push, torque, elevator
- “Knowing how to place the endoscope or device where you want”
- “Recognizing difficult or unusual situations and adapting your technique”
- “Either you have technical skill, either you don’t”
- “Technical skill can be taught”

WHAT IS CLINICAL JUDGMENT IN ENDOSCOPY…?

- “A symphony of different skills”
- “Being able to question indication and therapeutic plan”
- “The capacity to evaluate the risks and benefits of the different management alternatives for a given clinical situation, in a given patient””
- “Technical skills can be taught, but not clinical judgment”
- “Empathy for the patient”
- “Treating a patient, not a lab test or a picture”

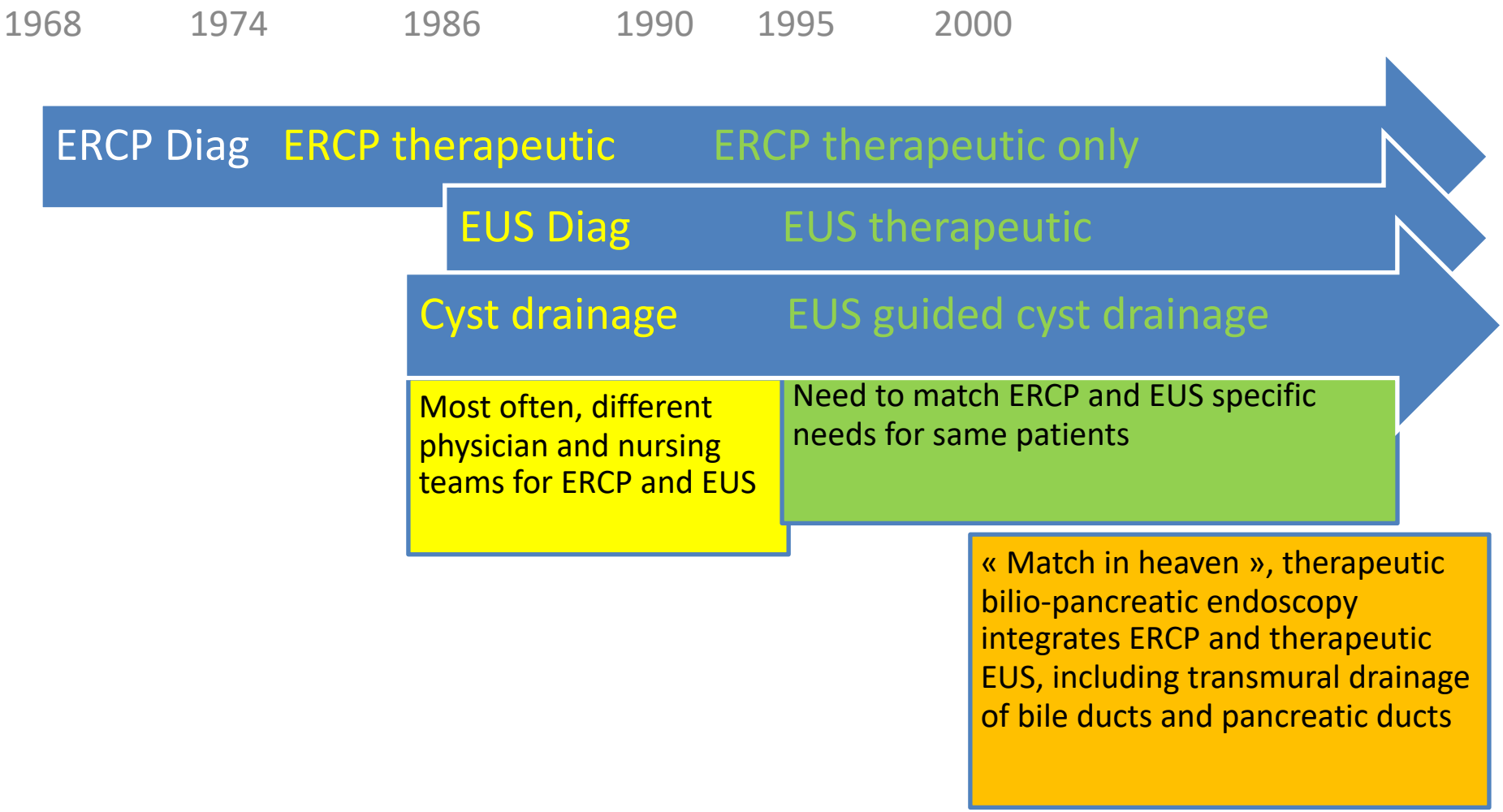
ASSESSMENT

- During the training
- After starting independant practice
- Not mandatory but should (will) become

ERCP quality Networks
GI quality improvement consortium
Medcards reporting success and complication
Payers selection

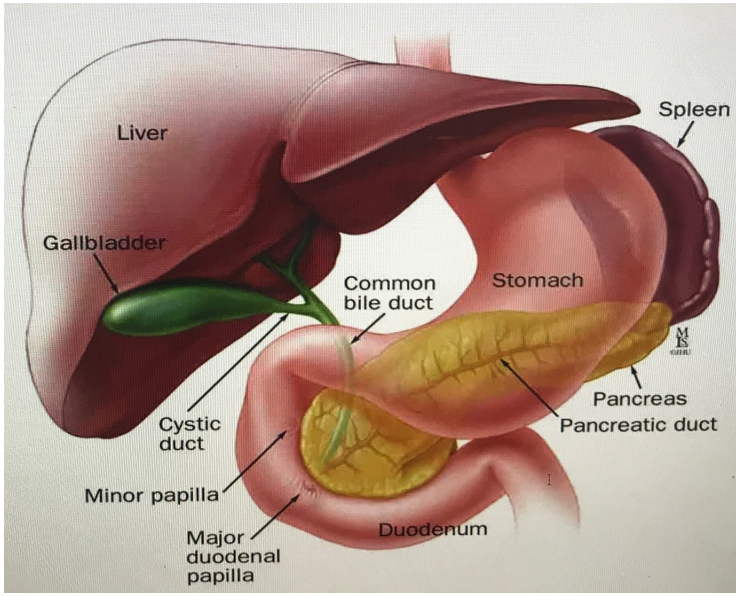
Cotton et al, GIE 2015

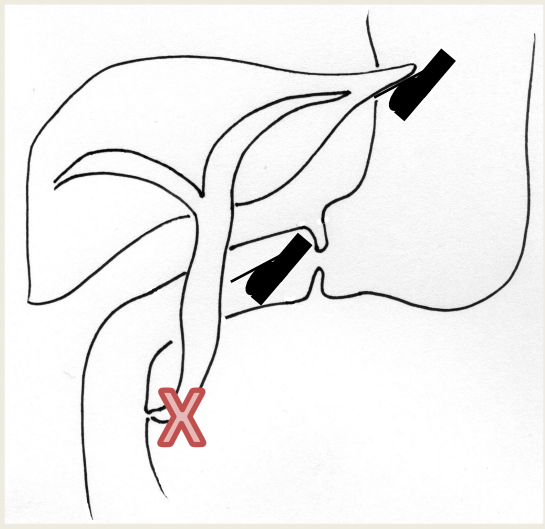
AND IN 2018, BILIO-PANCREATIC ENDOSCOPY ERCP AND EUS: BROTHERS IN ARMS



ERCP / EUS, BROTHERS IN ARM, TO BE PERFORMED IN THE SAME ROOM BY SAME OPERATORS/ ASSISTANTS

- Indication: Similar diseases, access to biliopancreatic structures not accessible or unsatisfactory by ERCP. Single limit becomes the distance from GI tract and vascular interposition (Doppler)
- Therapeutic EUS is part of bilio-pancreatic endoscopy
- Standing equipments, room settings, staff and many ancillary devices required for both techniques are similar
- Indications for EUS may appear during ERCP and vice-versa
- Ideally percutaneous approach should also be available in the same room to complete the armementarium





Bilio-pancreatic endoscopy

Anatomy **Training** **Indications** **Case Selection**

(secondary/tertiary)

MRI

EUS

→ **THERAPEUTIC PLANNING/TREATMENT**

Oncology/

Biologics

« Intervent. Radiology »

ERCP

iEUS

Laparoscopic Surgery

Surgery

Referal biliopancreatic treatment centers

Multidisciplinary Approach

Quality Control

Clinical Research

Translational research

Training/ education

BE EFFECTIVE AND ENJOY

TEACHING ERCP IN 2018

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- Is not an occasional job (like ERCP)
- Requires high volume centers
- Requires competency and generosity from the trainer
- Cannot be involved in a standard GI fellowship
- Advanced fellows requires dedication, involvement, clinical judgement and skills
- Must today be associated with teaching of therapeutic EUS
- Competency should be assessed for credentials

GEEW

37th annual meeting
June 19-21, 2019
Brussels

www.live-endoscopy.com