Non-vascular Abdominal Interventions:

What Can Go Wrong?







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Key Questions After a Percutaneous Intervention

1. Did I achieve the intended goal?

• 2. Will it function as planned?

3. Are there any complications?

Common Non-Vascular Interventions

Diagnostic/therapeutic aspirations

Percutaneous abscess drainage

Nephrostomy

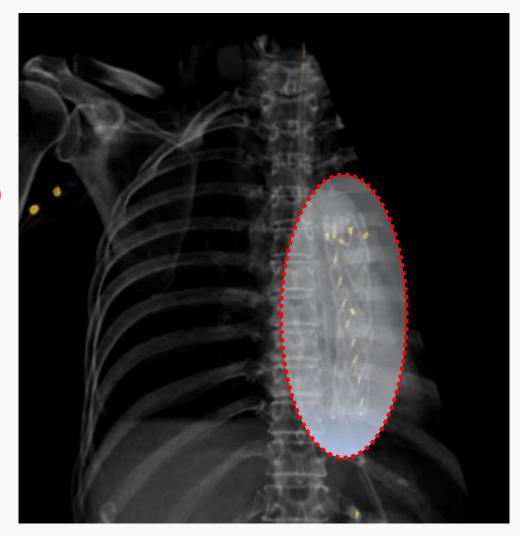
PTBD (Percutaneous Transhepatic Biliary Drainage)

(Thoracic duct embolization – not common)

• 1. Did we achieve the intended goal? NO

• 2. Will it function as planned? NO

• 3. Are there any complications? YES

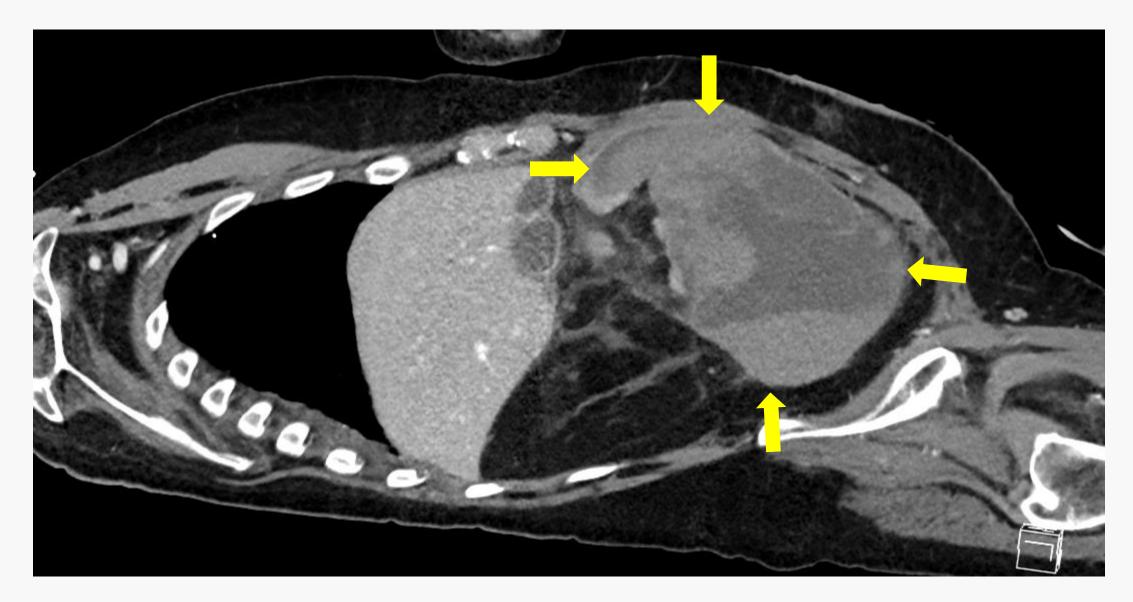


Common Non-Vascular Interventions

Diagnostic/therapeutic aspirations

Percutaneous abscess drainage

Bleeding complication







- Balance risk vs. benefit
- Justified by a clear and valid clinical indication

Key Question

Do the patient need a Drainage Bag?



25 vs 2000 ml







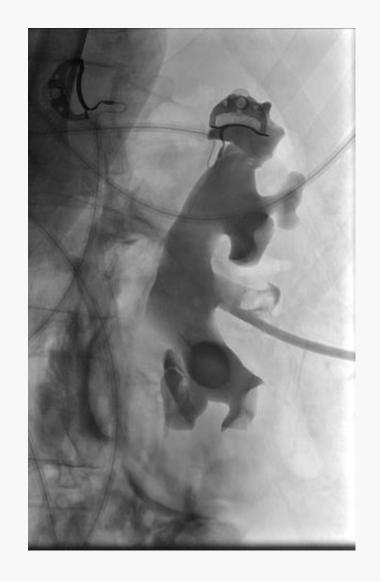
Complications of Nephrostomy

- Hemorrhage: Post-procedural bleeding
- Catheter traversing colon
- Malpositioned catheter

Tip outside the collecting system



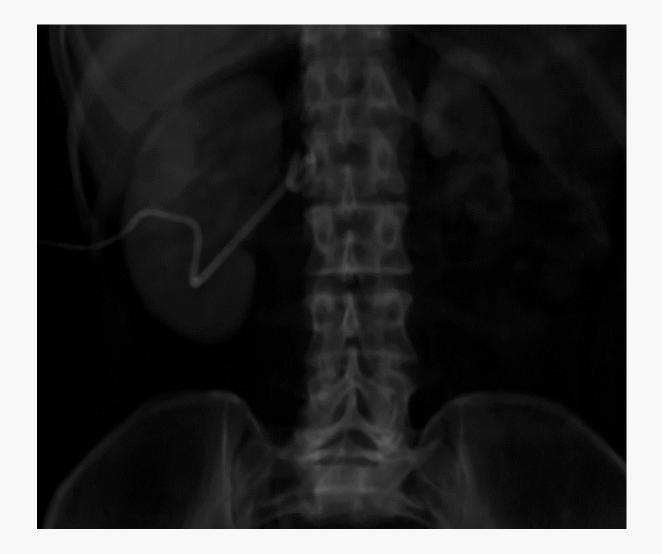




Complications of Nephrostomy

- Hemorrhage: Post-procedural bleeding
- Catheter traversing colon
- Malpositioned catheter
- Critical misplacement:
 - Catheter inadvertently advanced into superior vena cava
 - Pericardial involvement observed risk of tamponade









Liver Bleeding - Percutaneous Transhepatic Biliary Drainage - PTBD

Vascular injury, most serious hepatic arterial injury

Endovascular coil embolization needed

Phrenica artery







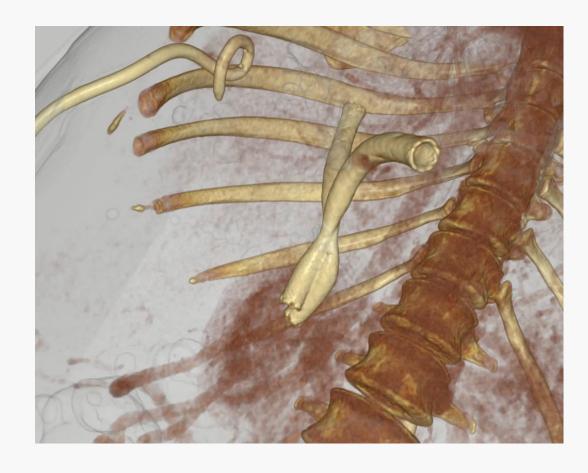




Bile leakage!!!







Obstructed stents? -> Cholangitis





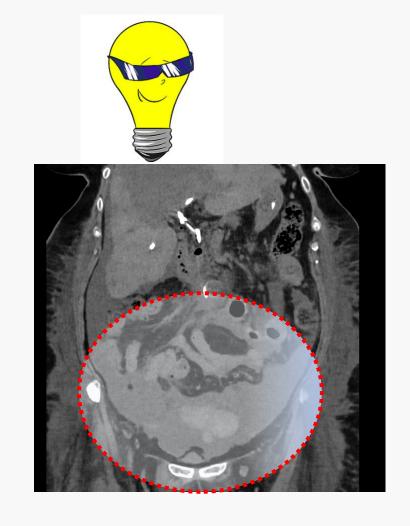


- Non-vascular abdominal interventions carry real risks
- Malpositioned catheters or stents
 - Must be recognized and reported
 - Evaluate both position and function
 - Don't assume they're working just because they're present



Take Home Message

- Peritoneal fluid post PTBD?
 - Always suspeckt Bile leakage
 - Report findings clearly on CT!





Take Home Message



- Peritoneal fluid post PTBD?
 - Always suspeckt Bile leakage
 - Report findings clearly on CT!

- Thorasic duct embolization:
 - Remember TDE as a valuable therapeutic option
 - especially after esophageal surgery / chylothorax







- Identify subtle signs of complications
 - Gas in the biliary tree can indicate serious pathology
 - Alpha looping drains





Talk to the patient

- Before the procedure
- During the procedure
- After the procedure

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