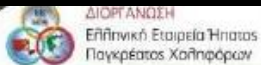


RARE ISSUES AND DEBATES IN HPB CANCER

ΔΙΑΔΕΡΜΙΚΗ ΔΙΗΠΑΤΙΚΗ ΠΑΡΟΧΕΤΕΥΣΗ ΧΟΛΗΦΟΡΩΝ PTBD

Χρυσοβαλάντης Ι. Βεργαδής
Επιμελητής Β' ΕΣΥ



ΔΙΟΡΓΑΝΩΣΗ
Ελληνική Εταιρεία Ήπατος
Παγκρέατος Χοληφόρων



ΕΕ ΣΥΝΕΡΓΑΣΙΑ
Α' Χειρουργική Κλινική Ε.Κ.Π.Α.
Γ.Ν. Αθηνών «Λαϊκό»



ΥΠΟ ΤΗΝ ΑΙΓΙΔΑ
Ιατρική Σχολή
Ε.Κ.Π.Α.



Ελληνική
Χειρουργική
Εταιρεία



3-5 Μαρτίου 2017

Ξενοδοχείο **Crowne Plaza**, Αθήνα

Ήπατος Παγκρέατος Χοληφόρων

1^ο Πανελλήνιο Συνέδριο
της Ελληνικής Εταιρείας



ΔΗΛΩΣΗ

- Δηλώνω ότι δεν έχω (προσωπικά ή ως μέλος εργασιακής/ερευνητικής ομάδας) ή μέλος της οικογένειάς μου οποιοδήποτε οικονομικό ή άλλου είδους όφελος από τις εταιρείες/επιχειρήσεις που διοργανώνουν /χρηματοδοτούν την άνω εκδήλωση κατά τη διάρκεια των τελευταίων 4 ετών.

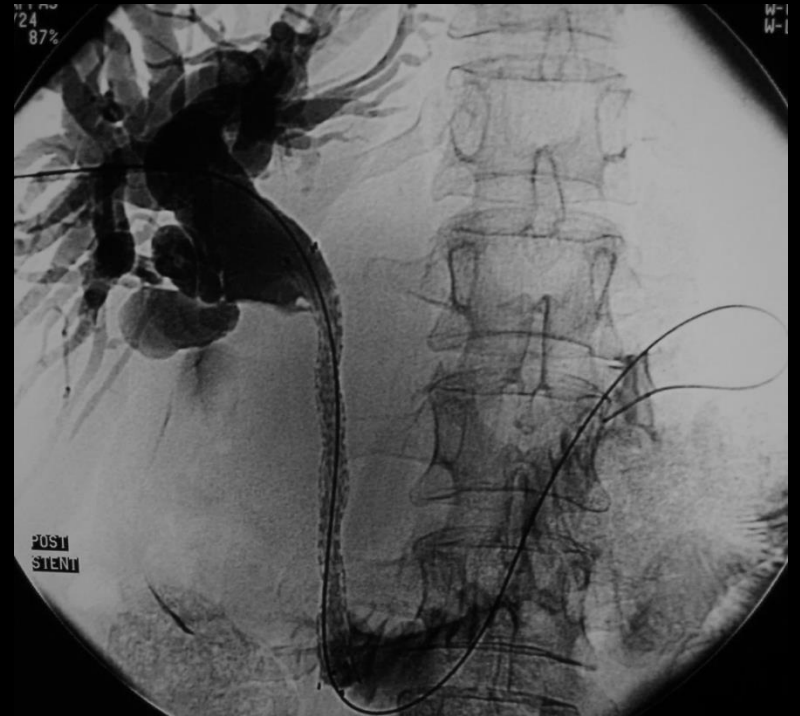
TEXNIKH



PTCD

TEXNIKH

PTCD



PTCD

ТЕХНИК



ΕΝΔΕΙΞΕΙΣ ΠΑΡΟΧΕΤΕΥΣΗΣ ΧΟΛΗΦΟΡΩΝ

- Ίκτερος
- Κνησμός
- Χολαγγειίτιδα
- Προς χημειοθεραπεία
- Προεγχειρητικά για τη βελτίωση έκβασης χειρουργείου

ΕΠΙΠΛΟΚΕΣ

PTCD

- Άμεσες: ουδός
 - Σήψη (2,5%) (5%)
 - Αιμορραγία (2,5%) (5%)
 - Εντοπισμένη φλεγμονή (1,2%) (5%)
 - Πνευμοθώρακας (0,5%) (2%)
 - Θάνατος (1,7%) (3%)
- Απώτερες:
 - Χολαγγειίτιδα
 - Διαφυγή χολής
 - Μετακίνηση ή απόφραξη παροχετευτικού σωλήνα
 - Επιμόλυνση τραύματος

ΕΠΙΠΛΟΚΕΣ



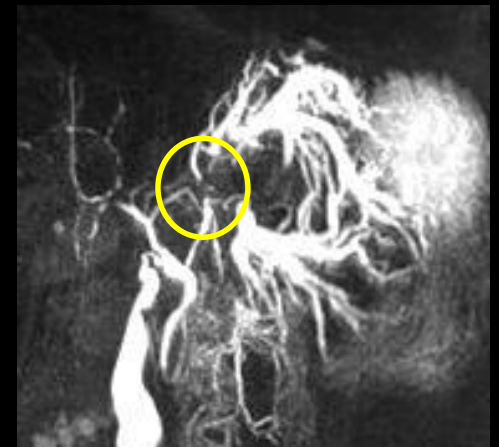
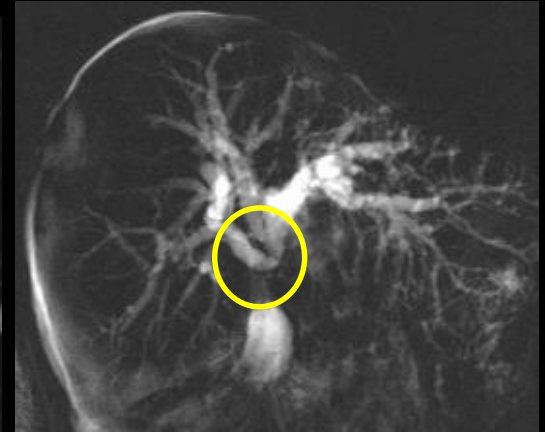
■ Εμβολισμός



ΚΑΚΟΗΘΟΥΣ ΑΙΤΙΟΛΟΓΙΑΣ ΑΠΟΦΡΑΞΗ ΧΟΛΗΦΟΡΩΝ

PTCD vs ERCP

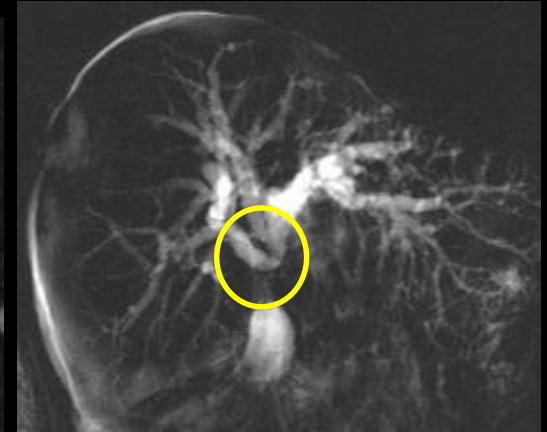
- Πρωτοπαθή
 - Πάγκρεας
 - Δωδεκαδάκτυλο
 - Χοληφόροι πόροι
 - Χοληδόχος κύστη
 - Ήπαρ
- Δευτεροπαθή
 - Λεμφαδένες
 - Ήπαρ
 - Πάγκρεας



ΚΑΚΟΗΘΟΥΣ ΑΙΤΙΟΛΟΓΙΑΣ ΑΠΟΦΡΑΞΗ ΧΟΛΗΦΟΡΩΝ

PTCD vs ERCP

- Περιφερικές



- Κεντρικές



ΠΕΡΙΦΕΡΙΚΕΣ ΑΠΟΦΡΑΞΕΙΣ ΧΟΛΗΦΟΡΩΝ

PTCD

ΠΕΡΙΦΕΡΙΚΕΣ ΑΠΟΦΡΑΞΕΙΣ ΧΟΛΗΦΟΡΩΝ

- Straightforward
- Δεξιά (μεσοπλεύριος) ή αριστερά (υποξιφοειδική) προσπέλαση
- Τοποθέτηση stent ή έσω-έξω σωλήνα

PTCD



ΠΕΡΙΦΕΡΙΚΕΣ ΑΠΟΦΡΑΞΕΙΣ ΧΟΛΗΦΟΡΩΝ

■ αποτελέσματα

■ Τεχνική επιτυχία >90%

Eur Radiol (2008) 18: 448–456
DOI 10.1007/s00330-007-0796-6

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Schima 1997 [34]	41	41	0	100%/–	~2%/39%	–
Stoker 1993 [21]	75	0	75	100%/–	21%/1%/15%	–
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ΠΕΡΙΦΕΡΙΚΕΣ ΑΠΟΦΡΑΞΕΙΣ ΧΟΛΗΦΟΡΩΝ

■ αποτελέσματα

■ Κλινική επιτυχία 77-98%

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■ αποτελέσματα

■ Επιπλοκές 8-30%

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PTCD

ΚΕΝΤΡΙΚΕΣ ΑΠΟΦΡΑΞΕΙΣ ΧΟΛΗΦΟΡΩΝ

PTCD

- Περίπλοκη επέμβαση
- Δεξιά , αριστερά ή αμφοτερόπλευρη παροχέτευση?
- Ποιο λοβό?
- Τοποθέτηση stent ή έσω-έξω σωλήνα?
- Πλαστικά ή μεταλλικά stents?
- Stent δίκην «T» ή «Y»?
- Stent στο φύμα του Vater?

ΚΕΝΤΡΙΚΕΣ ΑΠΟΦΡΑΞΕΙΣ ΧΟΛΗΦΟΡΩΝ

■ αποτελέσματα

■ Τεχνική επιτυχία >90%

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■ αποτελέσματα

■ Κλινική επιτυχία 77-98%

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■ αποτελέσματα

■ Επιπλοκές 7-30%

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■ αποτελέσματα

■ Υποτροπή ίκτερου

14-25%

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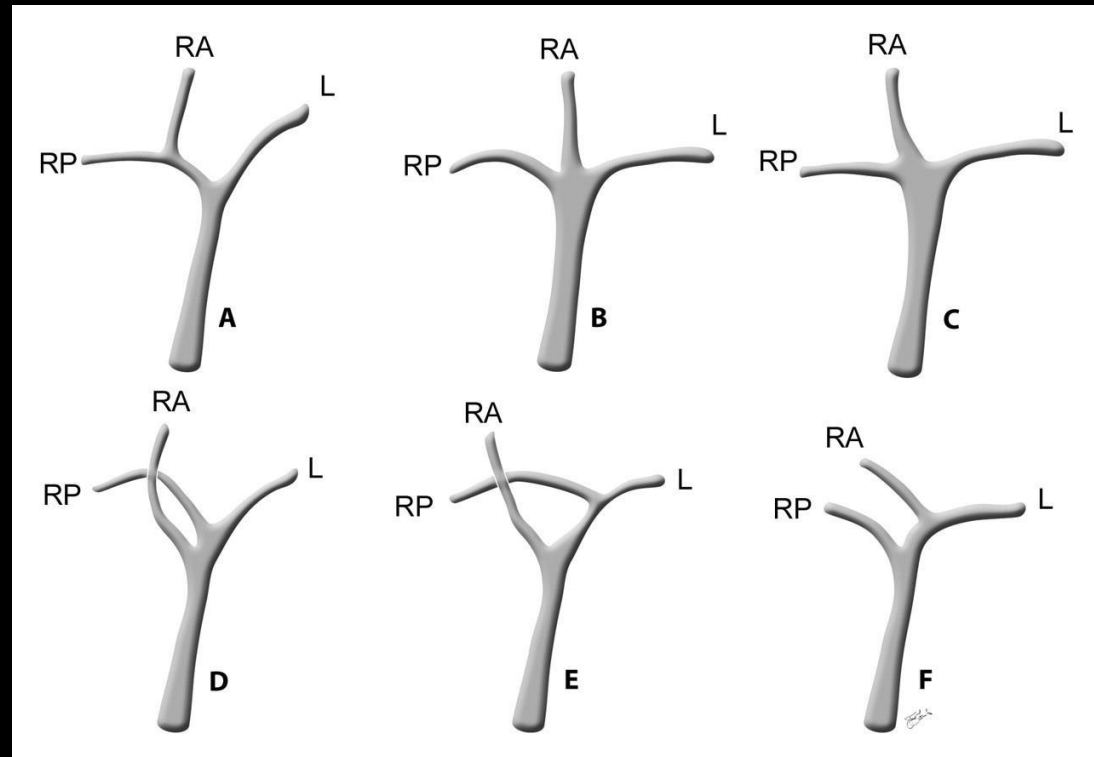
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PTCD

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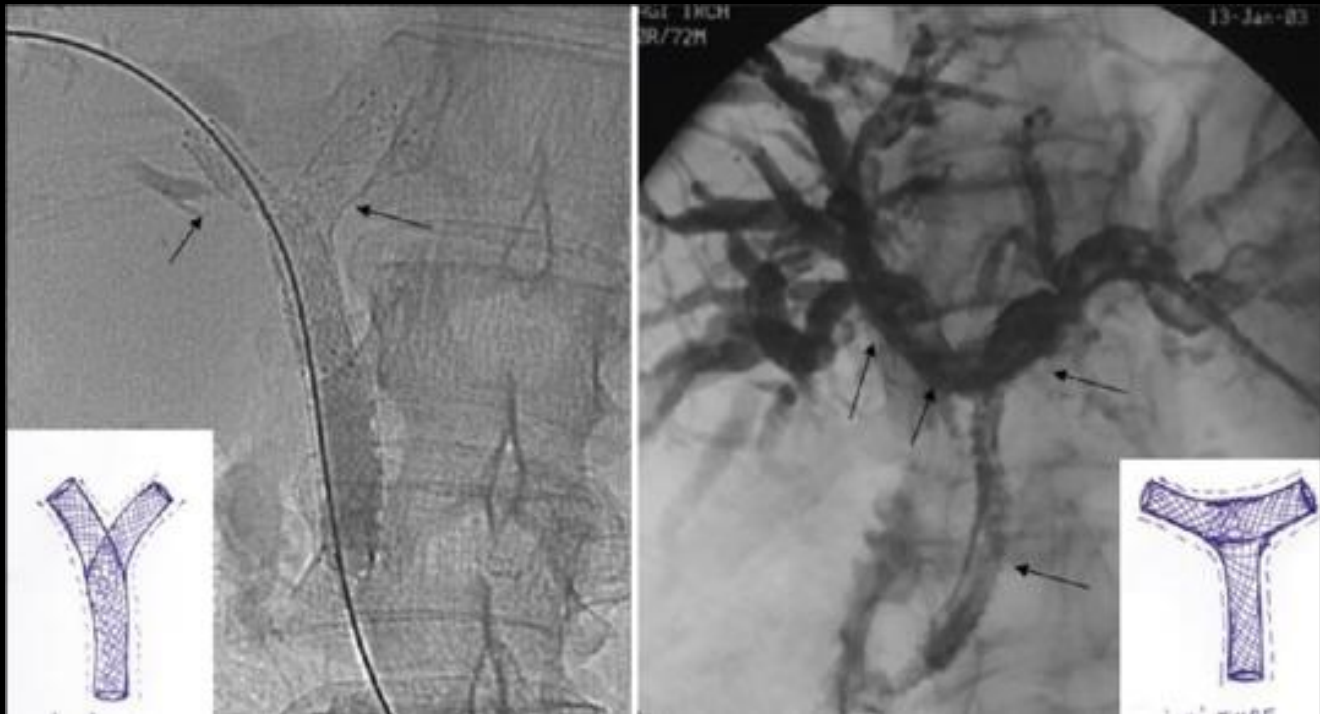
- Δεξιά ή αριστερά?
 - ανατομία
 - μέγιστος όγκος
 - Όχι το ατροφικό παρέγχυμα (πλην χολαγγειίτιδος)
- Αριστερά
 - Ασκήτης
 - Παραμονή σωλήνα



ΚΕΝΤΡΙΚΕΣ ΑΠΟΦΡΑΞΕΙΣ ΧΟΛΗΦΟΡΩΝ

- Ετερόπλευρα ή αμφοτερόπλευρα
 - Δεν υπάρχει συμφωνία
 - Bismuth type IV?

PTCD



Inal et al J Vasc Interv Radiol 2003;14 : 1409 –16

Ind J Palliat Care. 2016 Oct-Dec; 22(4): 378–387.

Uberoi, R., Das, N., Moss, J. et al. Cardiovasc Intervent Radiol (2012) 35: 127

ΑΠΟΦΡΑΞΕΙΣ ΧΟΛΗΦΟΡΩΝ

- Μεταλλικό Stent ή πλαστικός καθετήρας?
 - Παρόμοια αρχικά αποτελέσματα
- Καθετήρας:
 - Δυνητικά εξαιρέσιμη νόσος?
 - Αμφιβολία ικανοποιητικής παροχέτευσης
 - Επί χολαγγειίτιδας
 - Επί αιμορραγίας - λίθων
- Μεταλλικό Stent:
 - Μακροχρόνια βατότητα
 - Ποιότητα ζωής

ΑΠΟΦΡΑΞΕΙΣ ΧΟΛΗΦΟΡΩΝ

PTCD

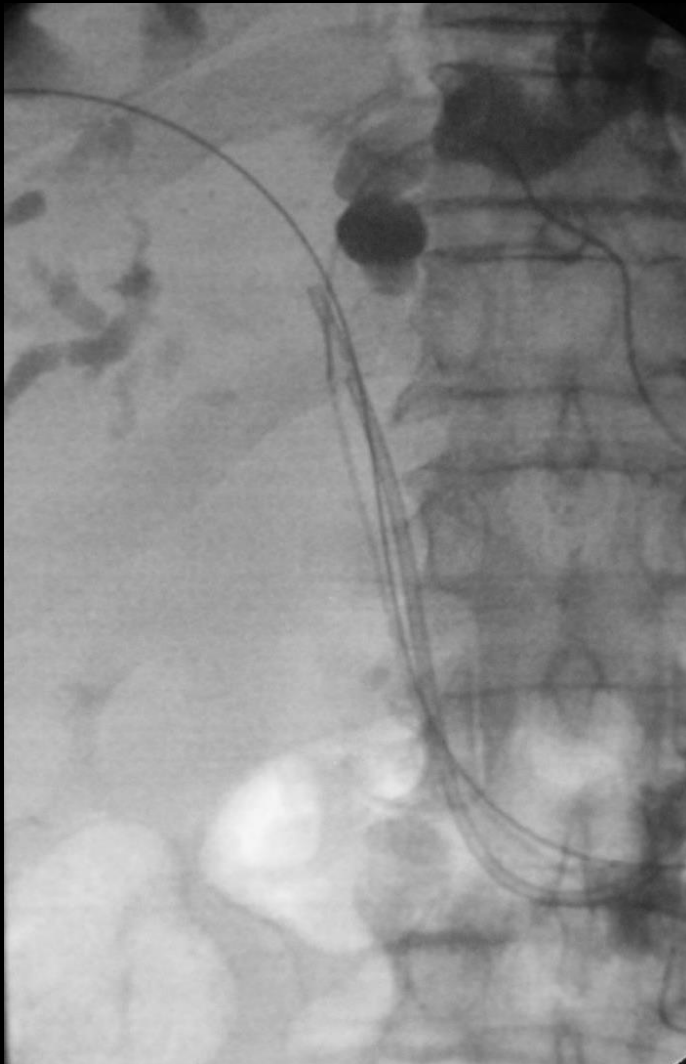
- Προεγχειρητική παροχέτευση
 - Δεν υπάρχει συμφωνία
 - Πλαστικά
- Ενδείξεις:
 - Καθυστέρηση για επέμβαση
 - Neoadjuvant RCTx // CTx
 - Χολαγγειίτιδα
 - Χολερυθρίνη $\sim \geq 10$ mg//dl
 - FLR $< 30\%$
- Παραμονή σωλήνα στην αναστόμωση
- Μετεγχειρητικές μολυσματικές επιπλοκές?

Timothy J. Kennedy et al HPB 2009, 11, 445–451

ΑΠΟΦΡΑΞΕΙΣ ΧΟΛΗΦΟΡΩΝ

- Προεγχειρητική παροχέτευση

PTCD



LAIKO"



FLI
17-0c
09: 4;
W-U:
W-L:

ΑΠΟΦΡΑΞΕΙΣ ΧΟΛΗΦΟΡΩΝ

- Προεγχειρητική παροχέτευση
- Υποτροπή νόσου στην πορεία του καθετήρα
 - Χολαγγειοκαρκίνωμα
 - Υποτροπή :5,2%
 - ~14,4 μήνες από το χειρουργείο
 - Παράγοντες κινδύνου
 - Παραμονή PTBD (>60 ημέρες)
 - Πολλαπλοί καθετήρες
- Μειωμένη επιβίωση

PTCD

ΑΠΟΦΡΑΞΕΙΣ ΧΟΛΗΦΟΡΩΝ

■ Προεγχειρητική παροχέτευση

Ann Surg Oncol
DOI 10.1245/s10434-015-4676-z

Annals of
SURGICAL ONCOLOGY
OFFICIAL JOURNAL OF THE SOCIETY OF SURGICAL ONCOLOGY



ORIGINAL ARTICLE – HEPATOBILIARY TUMORS

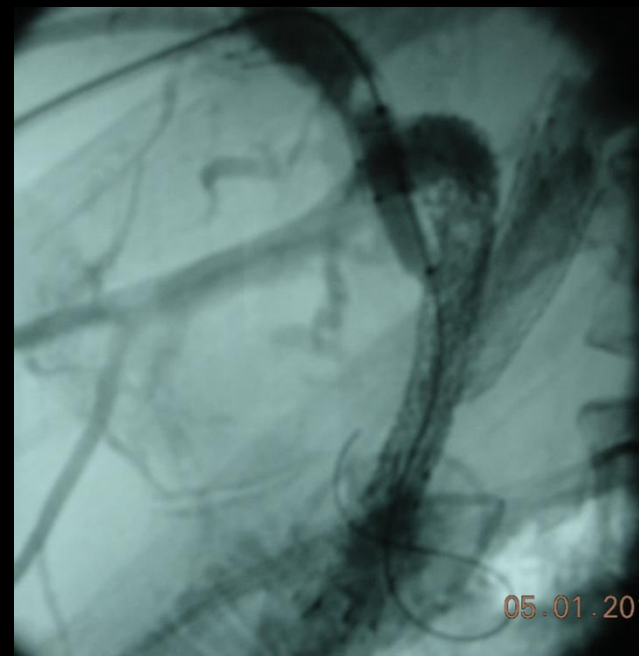
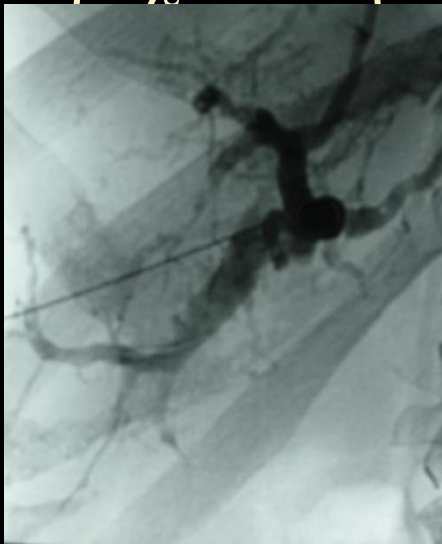
Percutaneous Preoperative Biliary Drainage for Resectable Perihilar Cholangiocarcinoma: No Association with Survival and No Increase in Seeding Metastases

PTCD

ΑΠΟΦΡΑΞΕΙΣ ΧΟΛΗΦΟΡΩΝ

- Παροχέτευση επί υποτροπής στη χολοπεπτική αναστόμωση

PTCD



The British Society of
Interventional Radiology

Biliary Drainage & Stent Audit Report

- 833 ασθενείς σε 44 νοσοκομεία
- Κακοήθειες : 88%
- Τοποθέτηση stent ή έσω-έξω σωλήνα
- Περιφερικές αποφράξεις: 51,4%
- Καταγραφή αριθμού παρακεντήσεων χοληφόρων

- Τεχνική επιτυχία: >95%
- Πτώση τιμών χολερυθρίνης : 79%
- Καλύτερη παροχέτευση με stenting δια του σφιγκτήρα Oddi
- Ανακούφιση συμπτωμάτων ανεξάρτητη του ύψους απόφραξης
- Σε πυλαίες αποφράξεις καλύτερα αποτελέσματα με αμφοτερόπλευρη παροχέτευση

- Ενδονοσοκομειακή θνητότητα: 19,8%
- Μείζονες επιπλοκές: 7,9%
 - (σήψη, νεφρική ανεπάρκεια, αιμορραγία)
- + Συσχέτιση αιμορραγικών επιπλοκών
 - × ↑↑ Ασκίτης
 - × ↑ INR
 - × ↓ PLT's

PTCD

Outcomes by number of annual cases performed	1-5	6-10	11-20	>20
>3 passes to enter ducts	33.3%	21.9%	12.6%	20.6%
Major complications	33.3%	14.3%	5.1%	6.3%
Minor Complications	50%	30.8%	23.4%	26%
Mortality	33.3%	25%	19.8%	16.8%

PTCD vs ERCP

EVIDENCE

EVIDENCE

Leng et al. *World Journal of Surgical Oncology* 2014, 12:272
<http://www.wjso.com/content/12/1/272>



WORLD JOURNAL OF
SURGICAL ONCOLOGY

Percutaneous transhepatic and endoscopic biliary drainage for malignant biliary tract obstruction: a meta-analysis

Conclusions: The results of our meta-analysis indicate that PTBD had a higher therapeutic success rate than EBD in the treatment of malignancy-induced biliary obstruction. The mortality and complication rates of the two techniques were similar.

PTCD vs ERCP

EVIDENCE

Digestive Endoscopy 2015; 27: 137–145

doi: 10.1111/den.12320

Original Article

Comparison of percutaneous transhepatic biliary drainage and endoscopic biliary drainage in the management of malignant biliary tract obstruction: A meta-analysis

CONCLUSIONS

IN CONCLUSION, BOTH PTBD and EBD are effective in relieving biliary obstruction in cases of MBTO. PTBD may be associated with a better therapeutic success rate and lower incidence of cholangitis than EBD, and the overall complication rate, pancreatitis rate, and 30-day mortality of the two procedures are similar.

EVIDENCE

PTCD vs ERCP

Original Investigation

January 2016

Comparison of Adverse Events for Endoscopic vs Percutaneous Biliary Drainage in the Treatment of Malignant Biliary Tract Obstruction in an Inpatient National Cohort

JAMA

Oncology

Sumant Inamdar, MD¹; Eoin Slattery, MD²; Ramandeep Bhalla, MD¹; [et al](#)

Conclusions and Relevance Our results support the finding that endoscopic biliary drainage for malignant biliary obstruction is a first-line intervention. Endoscopic drainage is superior to percutaneous drainage, in regard to adverse event rate, for patients with pancreatic cancer. For patients with cholangiocarcinoma, endoscopic drainage is superior in centers that perform a low volume of percutaneous biliary drainage procedures.

EVIDENCE

JAMA

Oncology

Role of Endoscopic vs Percutaneous Biliary Drainage in the Treatment of Malignant Biliary Tract Obstruction

To the Editor The recent study by Inamdar et al¹ suggested that

To determine the superiority of a procedure, one must also consider the success rate. A total of 5333 failed EBD cases (5.5%) were excluded from this analysis.¹ Percutaneous transhepatic biliary drainage has a higher technical success rate than EBD³ and is particularly useful in cases of completely occluded hilum and altered anatomy. In addition, PTBD remains a relatively safe option for patients who develop acute cholangitis after EBD.

Endoscopic biliary drainage and PTBD have complementary, not competing, roles in managing hepatobiliary occlusions. Endoscopic biliary drainage is less invasive than PTBD and is therefore the initial choice for standard biliary decompression. Often PTBD is used as a backup procedure for failed EBD and is typically the primary choice in complex clinical scenarios. The choice between EBD and PTBD should be based on clinical scenario and operator expertise.

EVIDENCE

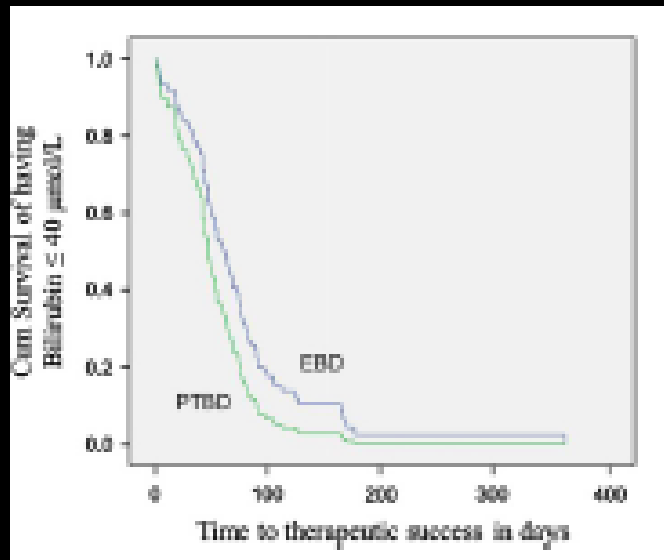
© SIR, 2013

CLINICAL STUDY

J Vasc Interv Radiol 2013; 24:113-121

Endoscopic or Percutaneous Biliary Drainage for Klatskin Tumors?

Thomas Walter, MD, PhD, Chia S. Ho, MD, Anne M. Horgan, MD, Andrew Warkentin, BHSc, Steve Gallinger, MD, PhD, Paul D. Greig, MD, PhD, Paul Kortan, MD, and Jennifer J. Knox, MD, PhD



In conclusion, the present retrospective study shows that PTBD is associated with higher technical and therapeutic success rates than EBD with plastic stent placement, and lowers serum bilirubin levels to therapeutically acceptable levels more quickly. The choice of appropriate modality should be guided by the local expertise available. However, our results suggest that PTBD should be seriously considered for biliary decompression in patients with obstructive jaundice as a result of Klatskin tumors.

PTCD vs ERCP

EVIDENCE

J Gastrointest Surg (2010) 14:119–125
DOI 10.1007/s11605-009-1009-1

ORIGINAL ARTICLE

Endoscopic and Percutaneous Preoperative Biliary Drainage in Patients with Suspected Hilar Cholangiocarcinoma

Conclusions Preoperative percutaneous drainage could outperform endoscopic stent placement in patients with resectable HCCA, showing fewer infectious complications, using less procedures.

PTCD vs ERCP

EVIDENCE

ACR Appropriateness Criteria[®]: Management of Benign and Malignant Biliary Obstruction, 2012 review

Management options	Rating in	
	Hilar block	Distal CBD obstruction
Endoscopic internal biliary catheter	6	8
Percutaneous internal/external biliary catheter	8	7
Surgery (transplant or hepatico-jejunostomy)	5	5
Permanent biliary metallic stent	6	5
Removable biliary covered stent	5	5
Endosonography-guided biliary drainage	3	4
Medical management only	2	3

Rating scale: 1, 2, 3 usually not appropriate; 4, 5, 6 may be appropriate; 7, 8, 9 usually appropriate. CBD: Common bile duct

PTCD vs ERCP

EVIDENCE

Biliary stenting: Indications, choice of stents and results: European Society of Gastrointestinal Endoscopy (ESGE) clinical guideline



3.6.1. Hilar strictures

In MHS of Bismuth-Corlette type ≥ 2 , better biliary drainage might be achieved with fewer infective complications by the percutaneous as compared with the endoscopic route (Evidence level 1-).

ΣΥΝΟΨΗ

PTCD vs ERCP

- PTC
 - Αποτυχία ERCP
 - Απόφραξη γαστρικής εξόδου
 - Χολοπεπτική αναστόμωση
 - Υψηλές - ενδοηπατικές αποφράξεις
- Διαθεσιμότητα – εμπειρία

Ευχαριστώ για την προσοχή σας

