



:
 : 1998 3 1999 5 32 (: =26:6) 36
 (n=10), (n=9), (n=7), (n=3), Vater (n=2), (n=1)
 ,
 : 1 94%
 9.7 ± 3.8 , 9.6 ± 3.1
 ($p=0.794$). 3.9 ± 2.4 , 3.8 ± 2.2
 ($p=0.892$). 1
 (2 , 3 , 1) , 3 (1 , 1
 , 1) 가
 ($p=0.729$).
 :

(Percutaneous transhepatic biliary
 drainage, PTBD)

, , 1998 3 1999 5
 (1 - 5). PTBD 32 (: =26:6) 36
 PTBD
 가 38 - 85 (: 59)
 가 가 2 (6.3%)
 가 가 10 (31.3%), 9
 (6 - 12). (28.1%), 7 (21.9%), 3
 가 PTBD (9.4%), Vater 1 (3.1%) 2
 2
 32 36 PTBD
 Shimadzu Digitex 2400

CX(Shimadzu Corporation, Kyoto, Japan)
 Acuson 128 XP(Acuson, Mountain View,
 California, U.S.A.)

1
 2

1998 2 12 2001 10 15

3.5 MHz
(needle guidance)
(Chiba biopsy needle, Cook, U.S.A.)

30

가

가

Couinaud S3, Couinaud S7
(11)

10 11

1.6) 가 가

3 mm

1 , 2 , 3 , 1
1 , 1 , 1

($p=0.729$) (Table 2).

4

가

38.3

1

Chi-square test
Fisher's Exact Test

PTBD 1 94%
9.7±3.8 ,
9.6±3.1
($p=0.794$).
3.9±2.4 , 3.8±2.2
($p=0.892$) (Table 1).

Table 1. Comparative Data of Ultrasound-guided PTBD

	Right approach	Left approach
Procedure time(minute)	9.7 ± 3.8	9.6 ± 3.1
Fluoro time(minute)	3.9 ± 2.4	3.8 ± 2.2

*Data are mean ± standard deviation

Table 2. Comparative Data of Complications of US-guided PTBD

	Right approach	Left approach
Major		
Bile peritonitis	1	none
Minor		
Hemobilia	2	1
Tube malfunction	3	none
Fever	none	1
Cholangitis	1	1

11
1 (, 1.2) , 12 1 (,
1.6) 가 가
3 mm

1 , 2 , 3 , 1
1 , 1 , 1

($p=0.729$) (Table 2).

PTBD
PTBD (5, 9, 11, 13, 14).
가

(1 - 5, 15 - 17).

PTBD 가
(13). PTBD

PTBD 가 (6 -
12).

(10 - 12).

가 ,

가 3 mm

(10, 11, 14).

가

가

PTBD가
(11).
가

PTBD

가
가

가

가

가

가

(30)

가

14, 17).

가

(7, 9, 11,

가

가

. PTBD

가

가

PTBD

PTBD

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US-guided Percutaneous Transhepatic Biliary Drainage: Comparative Study of Right-sided and Left-sided Approach¹

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Purpose: To compare the feasibility and safety of US-guided right and left percutaneous transhepatic biliary drainage (PTBD).

Materials and Methods: Between March 1998 and May 1999, 32 patients underwent 36 US-guided right or left PTBD in referred order, alternatively. The causes of biliary obstruction were bile duct stone (n=2), bile duct carcinoma (n=10), carcinoma of the pancreas (n=9), GB carcinoma (n=7), metastasis to the porta hepatis (n=3), and carcinoma of the ampulla of vater (n=1).

Technical success, procedure time, fluoroscopic time, and complications were evaluated.

Results: PTBD was successful in 94% of both right and left approach. The average procedure time was 9.7 ± 3.8 min. in the right approach and 9.6 ± 3.1 min. in the left approach, respectively ($p=0.794$). The average fluoroscopic time were 3.9 ± 2.4 min. in the right approach and 3.8 ± 2.2 min. in the left approach ($p=0.892$). A major complication, bile peritonitis, occurred in one of 16 patient with right-sided approach. Minor complications occurred in six right (2 hemobilia, 3 tube malfunction, 1 cholangitis) and three left (1 hemobilia, 1 fever, 1 cholangitis) PTBD. There were no significant difference in the complication rates between right and left PTBD ($p=0.729$).

Conclusion: There were no significant differences in feasibility and safety in US-guided right and left PTBD.

Index words : Bile ducts, percutaneous drainage
Bile ducts, US

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