



간-담도 개복 수술시 담도손상

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의상목

간, 담도 수술 후 동반될 수 있는 담도손상(bile duct injury: BDI)은 치명적인 결과를 초래할 수 있는 합병증이다. 따라서 수술 중 담도손상이 생기지 않도록 주의하고 손상이 발생한 경우 적절한 치료를 시행하여 이차적으로 합병증이 발생하지 않도록 최선의 다하여야 한다.

Bile Duct Injury (BDI)

1. Causes

1) Anatomy

- ① variation of anatomy
- ② distorted and inflamed anatomy

2) Surgeon's experience

BDI causes from imprecise dissection and inadequate demonstration of the anatomical structures.

No structure should be severed without confirmation.

2. Types

1) Resectional injury

2) Ischemic injury

3. Locations

1) Intrahepatic duct

- ① left hepatic duct
- ② right hepatic duct

2) Extrahepatic duct

- ① common bile duct
- ② common hepatic duct



- ③ hepatic confluence

4. Repair

1) Steps

- ① control of biliary drainage and sepsis.
- ② diagnosis of the extent of the injury: CT, cholangiogram
- ③ preparation of the surgery: percutaneous transhepatic stent
- ④ operation

* Advantages of preoperative percutaneous transhepatic stent

- ① to guide the dissection
- ② for postoperative cholangiography
- ③ to maintain the patency of the anastomoses

2) Operation time

- ① acute - minutes to hours
- ② late acute - days
- ③ late - weeks

* Advantages of late operation

- ① to allow resolution of the bilomas and attendant inflammation
- ② to allow the injury to stabilize because of vascular injury

3) Principles of anastomosis

- ① on well-vascularized duct
- ② mucosa to mucosa anastomosis
- ③ no tension after anastomosis

4) Factors influencing a satisfactory stricture repair

- ① the number of previous operations
- ② the site of stricture
- ③ the type of repair

5) Factors influencing mortality

- ① the number of previous operations
- ② a history of major infection

- ③ the site of BDI
- ④ the type of BDI

* Stenosis and fistula - most common complications of repair.

In recent years, the results of repairs of BDI has been reported excellent overall outcomes and are that results are poorest when the injury is above the bifurcation or involves a combination of injuries to the common bile duct and an aberrant duct.