Palliative Biliary Bypass Surgery

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Overview

• Define palliation
Overview

- Define palliation
- Cholangiocarcinoma overview
- Bile duct blockage
- Relieving bile duct blockage
- Surgical bypass
- Options

Palliation

- Relieving symptoms and suffering
• Relieving bile duct blockage
• Surgical bypass
• Options

Palliation

• Relieving symptoms and suffering
• Non-curative
• Used when someone is not able to undergo curative treatment
• Can be medical, surgical, endoscopic, supportive
• Can be medical, surgical, endoscopic, supportive
Bile Ducts

Adapted from American Cancer Society

Drain bile from liver to intestines
Bile Ducts

Drain bile from liver to intestines

Bile Duct Cancer

- Cholangiocarcinoma
- 3 types based on location
Bile Ducts

Bile Duct Cancer

- Cholangiocarcinoma
- 3 types based on location

- Intrahepatic
Types of Cholangiocarcinoma

- Intrahepatic
- Intrahepatic
- Hilar
Types of Cholangiocarcinoma

- Intrahepatic
- Hilar
- Distal
Types of Cholangiocarcinoma

- Intrahepatic
- Hilar
- Distal

Types of Cholangiocarcinoma

Adapted from American Cancer Society®
Types of Cholangiocarcinoma

Normal bile duct
Normal bile duct

Bile duct blockage

- Biliary obstruction
- Jaundice (skin and eyes turning yellow)
Bile duct blockage

- Biliary obstruction
- Jaundice (skin and eyes turning yellow)
- Itching
- Dark urine
- Light stools

Cholangitis

- Infection of the bile ducts
- Can be severe
Cholangitis

- Infection of the bile ducts
- Can be severe
  - High fevers
  - Right sided abdominal pain
  - Lethargy

Relieving the blockage

- ERCP stent
- PTC
• Lethargy

Relieving the blockage

• ERCP stent
• PTC
• Surgical bypass

ERCP stent

• Endoscopic retrograde cholangiopancreatography
• Usually done by gastroenterologist
ERCP stent

- Endoscopic retrograde cholangiopancreatography
- Usually done by gastroenterologist
- Scope from mouth into stomach to the bile duct
ERCP

ERCP stent

- Plastic vs metal
- Plastic usually initially placed
ERCP stent

- Plastic vs metal
- Plastic usually initially placed
- Metal may last longer

ERCP

- Advantages-
  - No tubes hanging from side
ERCP

- Advantages-
  - No tubes hanging from side
  - No incision
  - Quicker recovery than surgery

ERCP

- Disadvantages-
  - Need for stent replacement
ERCP

- Disadvantages-
  - Need for stent replacement
  - Cholangitis
  - Gallbladder inflammation

PTC

- Percutaneous transhepatic cholangiography
- Tube through the skin into the bile ducts
PTC

• Percutaneous transhepatic cholangiography
• Tube through the skin into the bile ducts
• May go into the intestines
• Usually has a bag
PTC

Pros

- Can drain the liver when unable to perform ERCP
- Can be converted to internal stent

Cons
PTC

• Pros
  • Can drain the liver when unable to perform ercp
  • Can be converted to internal stent

• Cons
  • Bleeding risk
  • May require scheduled changes to prevent infection
  • Discomfort/pain at skin site
  • Dehydration
  • Requires daily care
- Dehydration
- Requires daily care

Surgical bypass
Surgical bypass

Who is a candidate?

• Usually distal cholangiocarcinoma

• Occasionally options for hilar or intrahepatic cancers
Who is a candidate?

- Usually distal cholangiocarcinoma
- Occasionally options for hilar or intrahepatic cancers
- Generally healthy
- Good life expectancy
- When cancer found to be unresectable at operation
- Combined bile duct and intestine blockage
• Combined bile duct and intestine blockage

Biliary Bypass Surgery

https://gi.jhsps.org
Gastrojejunostomy

Uncomplicated recovery

- Hospital stay usually ~1 week
- Pain from incision requires narcotics
- Can start/resume chemotherapy in ~2-6 weeks
Uncomplicated recovery

- Hospital stay usually ~1 week
- Pain from incision requires narcotics
- Can start/resume chemotherapy in ~2-6 weeks
- May have a temporary drain tube
- Normal activity ~6 weeks later

Complications

- Bleeding
- Leakage from connection
- Infection
Complications

- Bleeding
- Leakage from connection
- Infection
- Intestinal blockage
- Prolonged hospital stay

Surgical bypass

- Pros
  - Decreased incidence of jaundice and cholangitis
  - Lower long term complications
Surgical bypass

• Pros
  • Decreased incidence of jaundice and cholangitis
  • Lower long term complications
  • ? increased survival?
  • Gastrojejunostomy/Celiac block
  • Fewer total hospital days

Surgical bypass

• Cons
  • Longer initial stay
  • Pain
Surgical bypass

• Cons
  • Longer initial stay
  • Pain
  • Increased early complications
  • Possible delay for chemotherapy

A Meta-Analysis of Randomized Trials: Immediate Stent Placement vs. Surgical Bypass in the Palliative Management of Malignant Biliary Obstruction

Evan S. Glazer, MD, PhD, Mark C. Hornbrook, PhD, and Robert S. Krouse, MD, FACS

1st Hospital Stay:  Total hospital days:
A Meta-Analysis of Randomized Trials: Immediate Stent Placement vs. Surgical Bypass in the Palliative Management of Malignant Biliary Obstruction

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1st Hospital Stay:  Total hospital days:

Stent - 15 days  Stent - 30-35
Surgery - 22 days  Surgery 10-22
Success
Complications
Recurrent Jaundice

Caveat

- No good study comparing METAL stent to surgery
- Most studies use plastic stents
- General agreement that metal stent preferred
Caveat

- No good study comparing METAL stent to surgery
- Most studies use plastic stents
- General agreement that metal stent preferred
- PTC can be converted to internal metal stent
How do I know if bypass may be right for me?

- Treatment in a center with a complete multidisciplinary team
  - Hepatobiliary surgery/Surgical oncology
  - Transplant surgery
  - Radiology
  - Interventional radiology
How do I know if bypass may be right for me?

- Treatment in a center with a complete multidisciplinary team
  - Hepatobiliary surgery/Surgical oncology
  - Transplant surgery
  - Radiology
  - Interventional radiology
  - Medical oncology
  - Interventional gastroenterology
  - Hepatology
  - Pathology

How do I know if bypass may be right for me?

- Good general health

- Life expectancy >4-6 months

- Failed stents

- Nausea/vomiting from tumor blocking stomach
How do I know if bypass may be right for me?

- Good general health
- Life expectancy >4-6 months
- Failed stents
- Nausea/vomiting from tumor blocking stomach
- Evaluation by experienced surgeon

ERCP vs PTC vs Surgery

- Institution capabilities
- Consider delays for chemotherapy
- PTC may eliminate transplant as treatment option
- ERCP stent requires less maintenance than PTC
ERCP vs PTC vs Surgery

- Institution capabilities
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Multidisciplinary team

- More likely to get individualized care when the team is capable of everything
- Care based on patient needs, not doctors’ capabilities!
Multidisciplinary team

• More likely to get individualized care when the team is capable of everything

• Care based on patient needs, not doctors’ capabilities!