



LITTLE COMPANY OF MARY

HOSPITAL AND HEALTH CARE CENTERS

The Technology to Heal, the Mission to Care

Biliary Interventions

Biliary interventions treat blockages, narrowing and/or injury of the passages between the liver, gallbladder and small intestine called bile ducts. Bile is produced in the liver and stored in the gallbladder where it can be released into the small intestine to aid in digestion. If the bile ducts become blocked, it may lead to inflammation or infection also known as cholecystitis. Biliary interventions may remove gallstones, drain excess bile or place a stent within a bile duct to treat your condition and restore the flow of fluids.

Biliary interventions are minimally invasive procedures performed to treat blockages or narrowing and injury of bile ducts. In addition, minimally invasive techniques can be used to treat an inflamed or infected gallbladder.

Bile, a fluid that helps digest fat in foods, is produced in the liver and flows through ducts or tubular passageways leading to the gallbladder where it is stored. When needed, the gallbladder contracts and releases bile through ducts into the small intestine.

If the bile ducts become blocked, bile cannot pass into the intestine and this may result in jaundice (in which the level of bile products in the blood becomes elevated). If the jaundice becomes severe, the patient will appear to have a yellowish hue, particularly in the whites of the eye. If the duct that connects the gallbladder to the rest of the bile ducts becomes blocked (usually due to gallstones in the gallbladder), this results in inflammation or infection (cholecystitis). This is generally treated by surgical removal of the gallbladder — either laparoscopically (minimally invasive) or by conventional open surgery. However, when patients are too ill to undergo surgical cholecystectomy, a percutaneous cholecystectomy (placement of a small tube through the skin into the gallbladder) may be performed by an interventional radiologist.

Biliary interventions include:

- Percutaneous transhepatic cholangiography (PTC), an x-ray procedure that involves the injection of a contrast material directly into the bile ducts inside the liver to produce pictures of the bile ducts. This procedure is usually performed by an interventional radiologist. If a blockage or narrowing is found, additional procedures may be performed, including:
 - insertion of a catheter to drain excess bile out of the body.
 - removal of gallstones, stone-like objects that form in the gallbladder or bile ducts.
 - stent placement, in which a small plastic or metal tube is placed inside a duct to help it remain open or to bypass an obstruction and allow fluids to drain internally.

- Percutaneous cholecystostomy, a minimally invasive procedure in which a tube is placed in the gallbladder under imaging guidance in order to decompress a distended, inflamed and usually infected gallbladder. This procedure is typically done in patients who are too ill to undergo cholecystectomy. It is usually performed by an interventional radiologist.

An interventional radiologist is a radiologist who performs minimally invasive procedures with imaging guidance. He/she is trained in the use of fluoroscopy, CT, and ultrasound to guide passage through the skin by needle puncture, including introduction of catheters and wires for performing procedures such as biopsies, draining fluid collections or abscesses, inserting drainage catheters and dilating or stenting narrowed ducts or vessels.