

Percutaneous Biliary Drainage

INTRODUCTION

Percutaneous biliary drainage procedure is performed when there is a Bile duct obstruction. This is a blockage in the tubes that carry bile from the liver to the gallbladder and small intestine

PROCEDURE

A percutaneous biliary drainage procedure involves the placement of a fine needle through your skin and into your liver. Some numbing medicine will be injected in the skin before the needle is inserted. Intravenous medications may also be given to you to make you more comfortable and relaxed. This is known as conscious sedation.

Following insertion, the needle will be guided to the correct location by an x-ray camera or ultrasound machine. The position of the needle will then be confirmed by the injection of x-ray contrast material (x-ray dye) and/or removal of fluid. X-ray pictures of your liver will then be taken. It may be necessary to make more than one pass of the needle in order to enter the bile duct. Depending on your condition, a drainage tube may be placed, a tissue sample taken, a stone removed, or a blockage of the bile ducts opened with a balloon catheter or stent placement.

If a drainage tube is placed it will be inserted through the skin and secured in place. It may need to stay in place for a long time to allow your bile fluid to drain. Tubes in the bile system often become plugged after time, which may result in the need to replace the tube at a future date.

If not replaced, a plugged tube may result in a serious infection. If an area of blockage is discovered, an attempt to open the blockage may be performed with a balloon catheter. This involves the insertion of a special tube, which has a tiny deflated balloon. The balloon is positioned at the site of the blockage and is then inflated. Following this procedure, if there still is not enough bile flow through the area of blockage, a metal mesh tube (stent) may be placed at the site. The stent will widen the duct and improve the bile flow. If a tissue sample is to be taken or a stone removed, either of these procedures can be performed through the needle access already created in your bile system.

RISKS

Risks associated with the procedure include pain or discomfort at the needle insertion site, bleeding at the site, internal bleeding, injury to a blood vessel, organ puncture, and infection which may result in an infection of the blood stream. Because a needle is being placed into your bile system, there is the risk of developing a bile leak that may cause peritonitis (an infection of the lining of the abdomen). There is also the risk of causing cholangitis (an infection of the bile fluid). The development of any infection, including peritonitis or cholangitis, may result in the need for intravenous antibiotics. Risks associated with the x-ray contrast material include an allergic reaction and reduced kidney function. The medications used for the conscious sedation are associated with the risks of aspiration (inhaling food or liquid into your lungs) or respiratory depression. In addition to these potential risks associated with the procedure, the x-ray contrast material, and the conscious sedation medications, there may be other unpredictable risks including death.

ALTERNATIVES

There may be other procedures that can be performed to further evaluate or manage your liver and/or bile duct condition. If you are unsure about having a percutaneous biliary drainage procedure, along with a possible stricture dilation, stent placement, tissue sampling, or stone removal, please discuss these other alternatives with your physician.