DEPARTMENT OF DIAGNOSTIC RADIOLOGY AND NUCLEAR MEDICINE

Patient Information Sheet
Transjugular Intrahepatic Portosystemic Shunt (TIPS)

General Indications for the Procedure: Severe liver disease with scarring (cirrhosis) can cause high pressure (hypertension) within the main vein that feeds the liver (the portal vein), as well as high pressure within veins connected to the portal vein. The high pressure can cause enlargement of these veins (varices), including the veins in the esophagus (esophageal varices). Portal hypertension also may cause excessive fluid accumulation within the abdomen (ascites). High pressure within esophageal veins can cause bleeding into the esophagus, which may be life threatening.

Description of the Procedure: Since TIPS is a major procedure that is potentially painful, it is performed under general anesthesia. Ultrasound pictures are first taken of a large vein in the patient's neck (the right jugular vein) to make certain it is open. If the right jugular vein is open, the skin of the right side of the neck is carefully cleaned with antiseptic solution, and sterile drapes are placed around the area. A plastic tube (a catheter) is then put into the right jugular vein and passed down to one of the large veins that drain the liver. A special needle is then passed through the catheter into the draining vein and from the draining vein across the liver into the portal vein, creating a communication between the draining vein and the portal vein. The communication is enlarged with a balloon, and then a metallic mesh stent is placed to keep the tract open. The procedure lasts 90-180 minutes, depending upon how easy or difficult it is to enter the portal vein. After the procedure the patient will go to a recovery area where he/she will be observed for 1-2 hours.

Risks of the Procedure: While the most common early complication is bleeding, the risk of having a major bleed after a TIPS procedure is small. The most important late complication is hepatic encephalopathy, a condition in which patients can experience disorientation and confusion. Encephalopathy can be controlled with diet and medication, but in some cases, it may be severe and flow through the TIPS shunt may have to be reduced or stopped.

Alternatives to the Procedure: The alternative is for the patient to undergo a surgical shunt to decompress his/her portal venous system. Depending upon the patient's underlying medical condition, surgery may be too risky to perform.

Probable Consequences of Refusing the Procedure: If patients decide not to have the TIPS procedure done, their condition may worsen, and they may need urgent care at a later time.

Persons performing the procedure: The key portions of the procedure will be performed by an attending physician who is a member of the medical staff of Rush University Medical Center, or a resident or fellow in Interventional Radiology who will be observed and supervised by a member of the medical staff. Residents are licensed physicians in an approved residency program. Fellows are licensed physicians who have completed a residency in radiology and are in an approved post-residency training program. The parts of the procedures residents or fellows will perform will be based on their level of training and competence.

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