Pulmonary Artery (Swan Ganz) Catheter Placement

A Pulmonary Artery catheter (Swan) is a long, thin, hollow tube placed in the large veins of the neck, upper chest, or groin. This is guided through the heart and into the large vessels of the lung (pulmonary artery). The Pulmonary Artery catheter measures pressures in the heart and the vessels going to the lungs.

A doctor inserts the catheter and it is connected to a monitor. The monitor displays wave forms and numbers. The purpose of this tube is to determine how much medicine or IV fluid to give you. In addition, the catheter is used to give IV fluids, medicine, and to take blood samples.

Risks

As with any procedure, there are risks. Some of the risks include:

- **Pain** – Patients may feel a poke as the doctor inserts the needle. Numbing medicine can be used to lessen the pain. Once the needle is in, the pain is often mild and goes away.
- **Collapsed lung** – The lung is very close to veins in the neck and chest. When a central catheter is placed in the chest area, if a needle passes through or misses the vein, the needle could pierce the lung and cause it to collapse. If this happens, the doctor can reinflate the lung by placing a chest tube. This may happen even if everything is done the right way.
- **Infection** – Any tube entering the body can make it easier for bacteria from the skin to get into the bloodstream. Special care in cleaning the skin and applying the dressing at the catheter site is done to decrease the risk of infection.

Some other risks specific to the Pulmonary Artery catheter include:

- **Altered heart rhythms** – The Pulmonary Artery catheter can tickle the heart and cause the heart to beat too fast or too slow. If this occurs, treatment is done to return the heart to a normal beat pattern.
- **Rupture of the pulmonary artery** – Though very rare, the catheter could break the large blood vessel in the lung. This could be life-threatening.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person’s health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 6/2015 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#6343