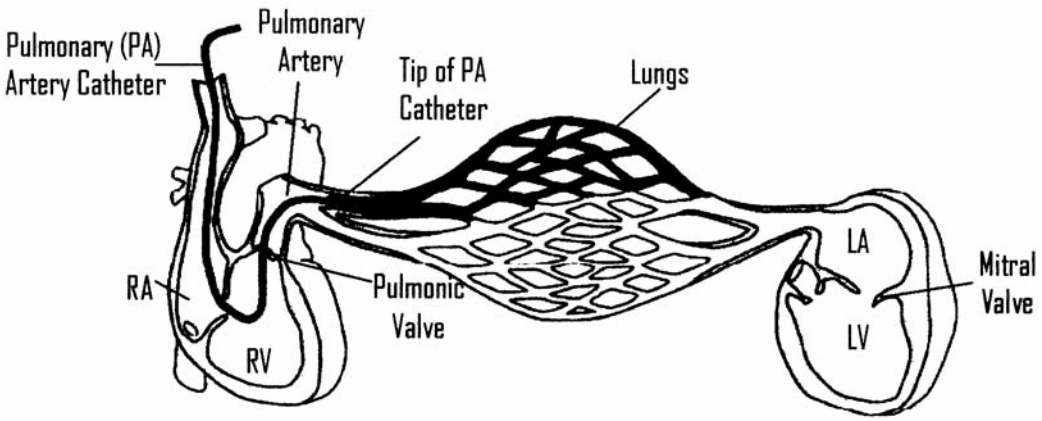

Figure 4.11: PA catheter in proper position with proximal port in right atrium and distal port in a branch of the pulmonary artery.

The pulmonary artery catheter is typically inserted via the jugular or subclavian vein. The femoral vein may also be used, although this limits patient mobility and there is increased concern for infection.

The balloon is inflated during insertion to allow blood flow to direct the catheter to the desired location, and to protect the endocardial structures and the pulmonary vessels from the hard tip of the catheter. The distal tip of the catheter is not covered during balloon inflation; therefore, intracardiac pressures and pressure in the pulmonary artery can be recorded, and the waveforms displayed during insertion. The first pressure to be measured during insertion is the right atrial pressure, then right ventricular pressure, followed by the pulmonary artery pressure. After insertion, the proper placement of the pulmonary artery catheter should be confirmed by chest x-ray.

Pressure Monitoring System

Pulmonary artery pressure monitoring requires a fluid system and an electrical system in order to display pressures and waveforms on a bedside monitor (Figure 4.12).

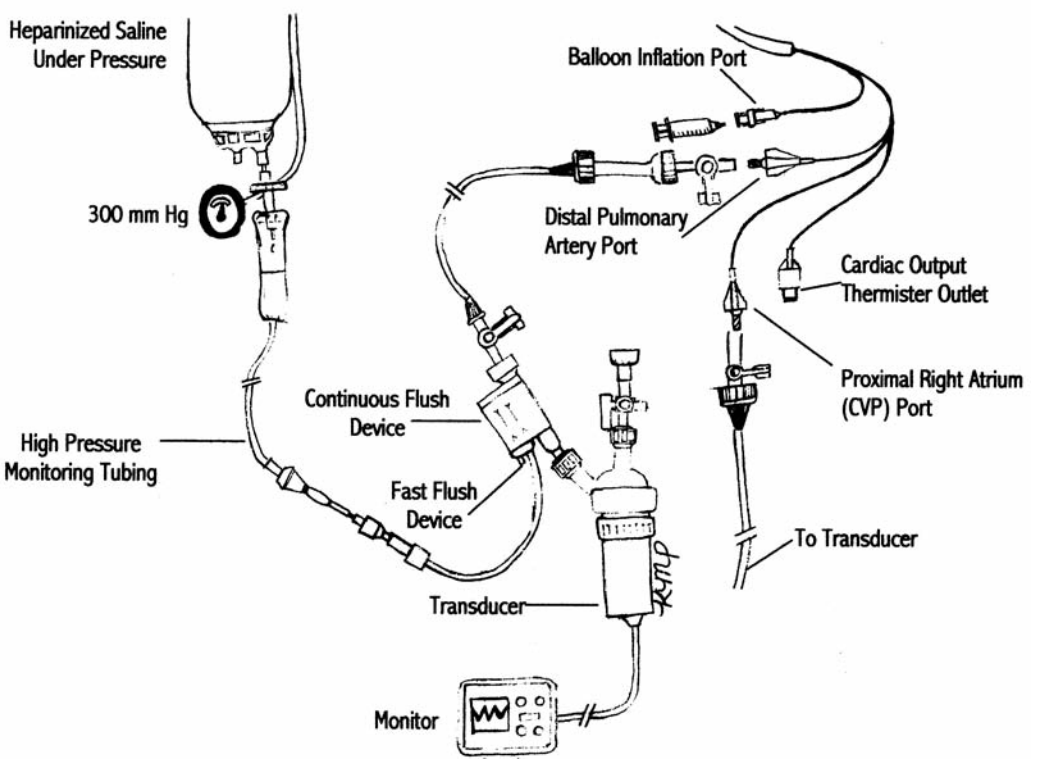

Figure 4.12: Pulmonary artery pressure monitoring system.