



Heel Stick

Use of fatty part of the heel to draw small amounts of blood for test. (Large amounts are drawn from indwelling IV lines.)

Intravenous Line

Small line placed into the vein for delivery of fluid, usually sugar water.

Arterial Lines

Small line placed into an artery that allows continuous monitoring of blood pressure and drawing blood for labs.

Oxygen Saturation

A small sticky probe placed on the baby's hand or foot that allows the oxygen level to be viewed on the bedside monitor.

PICC Line (Percutaneous Intravenous Central Catheter)

A long thin line passed into the baby's skin, usually in an arm or leg. And is passed through a blood vessel that goes deep into the baby's body. They are used to give IV fluids, nutrition and medications. They usually last longer than a regular peripheral IV.

Intubate

A procedure used to put a tube through the baby's mouth or nose into the windpipe. This tube is then attached to the equipment which assists breathing.

Extubate

A procedure to remove the breathing tube from the trachea.

Nasal Cannula

Small plastic prongs are placed in the nostrils to provide small amounts of oxygen.

Endotracheal tube (ETT)

A breathing tube is passed through the mouth or nose, into the trachea and connected to the ventilator.

CPAP

A device that provides expiration resistance. The baby is breathing on their own but this machine gives some pressure even as he/she exhales, to help keep the lungs from collapsing.

Ventilator or Respirator Treatment

Treatment using a breathing machine. The most common type of ventilator is called a conventional ventilator. (In Holden, the BIRD VIP GOLD is the brand of the conventional ventilator that is used.) A conventional ventilator provides positive pressure breaths, ie: (his breath is pushed into the lungs. The volume of air delivered is approximately the amount that the baby would breathe on their own. The ventilator not only provides positive pressure breaths but it may also provide additional oxygen. The ventilator is continuously adjusted to give babies the additional support that is needed.

High Frequency Oscillator Treatment

Treatment with another type of breathing machine which delivers very small breaths at a very high rate. The HFO is used for babies who are either not responding well to conventional ventilation or who have lung problems that respond better to this type of ventilator.

Phototherapy (Bili Light with Eye Patches)

Treatment with special lights to help break down bilirubin so it can leave the body in the stool or urine.

Nasogastric Tube

Treatment with tube that goes through baby's nose into the stomach. Used to keep the stomach empty at first and can also be used to feed baby when appropriate.

Therapeutic Hypothermia

Therapeutic hypothermia, or cooling, is a new treatment for babies who are born at or near their due date that we think might have had a brain injury before birth. Many people have heard of icing a joint that is hurt. Even though the brain is more complicated than a joint, cooling can still help reduce the effects of brain injury in some babies. There are two ways to administer therapeutic cooling; selective head cooling or whole body cooling, both of which we use.

Selective Head Cooling: The "Cool Cap" or "Brain Cooling" With this treatment, cold water, about the temperature of cold tap water, is piped through a soft plastic cap over the baby's scalp. We do this for 72 hours, from a cooling machine at the bedside. The baby's body temperature is slightly cool, between 93.2° and 95°F (34°-35°C), but the head is cooler than that.

Body Cooling is another way to administer therapeutic hypothermia. With this treatment, the baby is placed on a mattress with circulating water for 72 hours. The water is cool to begin with, and then the machine pumping the water automatically controls the water temperature to keep the baby's temperature within the body slightly cool, between 33° and 34° C (91.4°-93.2°F). Body cooling works on the same principal as head cooling.

ECMO

The University of Michigan ECMO program provides extracorporeal life support for newborns who

are experiencing life threatening heart or lung illness. ECMO, which stands for Extracorporeal Membrane Oxygenation, is basically heart/lung bypass outside of the operating room. Providing state of the art support, the U of M ECMO Program is the oldest and one of the largest ECMO Programs in the nation.

The Program cares for newborns in the NICU in along with the neonatal nurses and physicians. Each patient on ECMO is cared for both by an ECMO Specialist as well as a NICU nurse. The ECMO Specialists are highly skilled nurses and respiratory therapists who are trained in operation of the ECMO circuit and provide complete, patient centered care during a critical time in their hospital stay. For more information: <http://www.med.umich.edu/ecmo>