

Equipment You May See in the ICU

Many patients with brain injuries will appear to be asleep. Others are very restless, irritable, and aggressive. A patient has no control over this. This happens because the brain has been injured and is not working “normally.” Often families become anxious or embarrassed by this. Staff knows it is the head injury, not the patient, causing the behavior.

We may sedate your loved one to keep them calm. It takes time for the brain tissue to heal and for these issues to resolve.

You may see a lot of equipment at the bedside. Many families say this is scary. If you have questions about anything, please ask.



Equipment You May Notice

Arterial Line or Art-Line

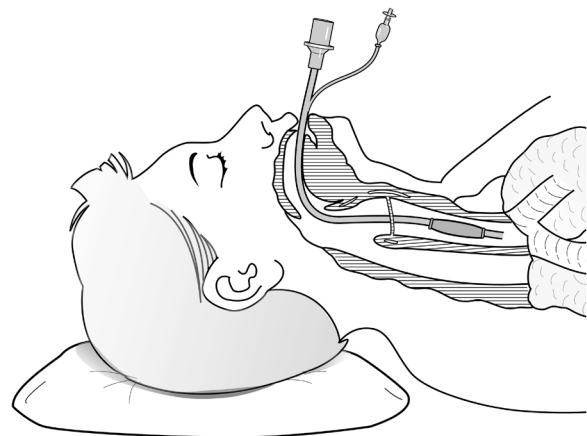
The art-line is a catheter that goes into an artery (often in the wrist). We can get blood pressure readings from this art-line. It also allows the nurse to take blood samples.

Central Venous Pressure Line, Central Line, or Triple Lumen

This is a large IV placed into one of the large blood vessels of the shoulder, neck, or groin. The catheter’s large size allows us to give medicine and fluids quickly and easily. It can also measure blood pressures. This helps us know if the patient needs more or less fluid.

Endotracheal Tube (ET Tube)

Often, people with head injuries are not as awake as usual. This can mean they may need help to breathe. If your loved one needs help breathing, a tube will be placed into the mouth or nose and then into the trachea (wind pipe). The tube attaches to the ventilator. The ET tube passes through the vocal cords, so your loved one will not be able to talk until the tube is removed.



Foley Catheter

This is a flexible rubber tube (catheter) placed into the bladder to drain urine. This helps us to measure the amount of urine coming out.

Intracranial Pressure (ICP) Monitor

This is a small pressure sensor that is placed surgically beneath the skull. It attaches to the ICP monitor. It allows staff to watch the ICP.



Monitor

The monitor is a machine at the side or head of the bed. It watches the heart rate and rhythm. It also gives readings of blood pressure, respirations, and heart and lung pressures when needed. Staff can see the numbers displayed on this screen on a monitor at the nurses' station.



Intravenous Line (IV)

IV lines allow access to veins for fluids and medicines. We will try to place the IVs in sites that might be more comfortable for the patient. We will need to avoid tough or fragile veins.

IV Pumps

Along-side the bed there will be several poles with small machines attached. It is common to see several machines and bags of fluid at the bedside. The IV pumps give fluids and medicines to your loved one.



Naso-Gastric (NG) or Oral-Gastric Tube

A small, flexible tube is placed into the nose or mouth and extends into the stomach. It is attached to a suction bottle on the wall near the bed. It removes stomach contents. This helps prevent nausea and vomiting. Later, it may be used to provide tube feedings.

Feeding Tubes

The patient may be fed through an IV at first. Later, we may place a feeding tube (NG tube) into the nose, and then down the swallowing tube (esophagus) into the stomach to provide food. When the patient is more awake, the speech therapist will help make sure he can eat safely. The patient will have swallow tests as needed.

The NG tube may be used for a while. If it is needed for a longer time, we may insert a gastrostomy feeding tube (G tube). This is a tube that goes right into the stomach. This option may seem scary at first. It is the best way to give the patient the nutrition needed to heal and grow. It also allows the patient's face to be free of tubes. Also, this tube is less likely to be pulled out by mistake.

Cervical Brace

When the head was injured, the neck could have also been twisted. The cervical brace helps control neck posture, reduce pain, prevent further injury, and promote healing.

The collar will be removed when the patient is more stable. You may also hear the cervical brace called "PMT collar" or "Philadelphia collar."

Pulse Oximetry (Pulse Ox)

This fits over a finger, toe, or ear. It shines a red light through the skin. It measures the amount of oxygen in the blood. A normal pulse ox reading is more than 92%.

Venodynes or Sequential Compression Stockings

These are plastic tubes wrapped in sleeves which are placed around the legs. They connect to a machine under the bed, which blows air into the tubes. The pressure on the legs helps blood flow better to prevent blood clots.

Traction

Sometimes bones may not heal well in a cast. They may need to have a small amount of tension or weight placed at the fracture site. This helps the bones heal in the best position. The tension is created by a series of cords, bars, and weights.

Restraints

Restraints are soft cloth devices used to prevent your loved one from pulling out tubes or IV lines by mistake. Restraints can be wrapped around the wrist or hands. Staff will closely watch the patient while the restraints are on.

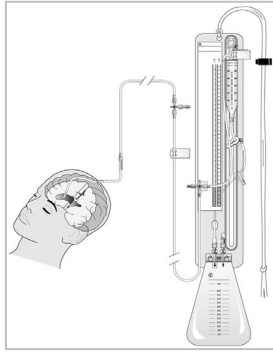
Ventilator

This machine is used to help your loved one breathe and keep enough oxygen in the blood. A tube is inserted through the mouth or nose into the trachea (wind pipe) and is attached to the ventilator. The patient will not be able to talk until this tube is removed.



Ventriculostomy

This is a catheter that goes into the ventricles or spaces of the brain. It is used to watch and control the pressure in the brain. Pressure can rise if natural fluid (cerebral spinal fluid, CSF) builds up. This device is just a short-term fix.



Shunt

A shunt is a thin plastic tube placed into the fluid spaces of the brain underneath the skin. The shunt keeps CSF draining from the brain down into the abdominal cavity. It may be needed to treat **hydrocephalus**. This is when CSF builds up instead of being absorbed. This extra fluid can cause pressure on the brain.

Chest Tubes

These tubes are inserted into the space between the ribs and the lungs. They drain fluid, air, or blood that can collect in this space. This tube will be attached to a drainage system. Sometimes suction is used to help it drain better. The suction causes the bubbling noise heard at the end of the bed.

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 © 11/2019 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#7421