## Nursing Alert

When working with tunneled catheters, peripherally inserted central catheters (PICCs), and peripheral intravenous (PIV) lines, avoid the use of any scissors around the tubing or dressing. Removal is best accomplished using fingers and much patience. In the event that a tunneled catheter is cut, use a padded clamp to clamp the catheter proximal to the exit site to avoid blood loss. Repair kits are available, which may save the catheter and avoid surgery to replace a cut catheter.

With the implanted device, the port must be palpated for placement and stabilized, the overlying skin cleansed, and only special noncoring Huber needles used to pierce the port's diaphragm on the top or side, depending on the style. To avoid repeated skin punctures, a special infusion set with a Huber needle and extension tubing with a Luer connection can be used (see Fig. 20-12). With this attached, the injection procedure is the same as for an intermittent infusion device or a central venous catheter. To prevent infection, meticulous aseptic technique must be used any time the devices are entered, including instillation of heparin or saline to prevent clotting. There should be a protocol stating that the Huber needle needs to be changed at established intervals, usually 5 to 7 days.

The children and parents are taught the procedure for care of the CVAD before discharge from the hospital, including preparation and injection of the prescribed medication, the flush, and dressing changes. A protective device may be recommended for some active children to prevent their accidentally dislodging the needle. Many children take responsibility for preparing and administering medications. Both verbal and written step-by-step instructions are provided for the learners.

## Nursing Tip

A pocket sewn on the inside of a T-shirt provides a place in which to coil the catheter line while the child is at play if a dressing is not used.

Infection and catheter occlusion are two of the most common