

CHEMOTHERAPY

Chemotherapy is the treatment of cancer diseases with anti-cancer medicines.

HOW CHEMOTHERAPY WORKS

When chemotherapy medicine gets into a cancer cell, it interferes with the cell's growth. Some chemotherapy medicines keep cells from dividing. Other kinds keep the cells from getting a substance they need to function. After a while, the cancer cells are destroyed.

You will receive a copy of the treatment plan ("road map"). This road map shows the chemotherapy medicines your child will receive, the way they are given, the planned days of treatment, and the tests that will be done before the chemotherapy is given.

There are usually 2 or 3 phases to treatment: induction, consolidation, and maintenance. In the *induction* phase, a combination of chemotherapy medicines is given to try to quickly reduce the number of cancer cells. Tests are done every few weeks to find out if the chemotherapy is working. The *consolidation* phase is intensive treatment. Not all treatment plans include a consolidation phase.

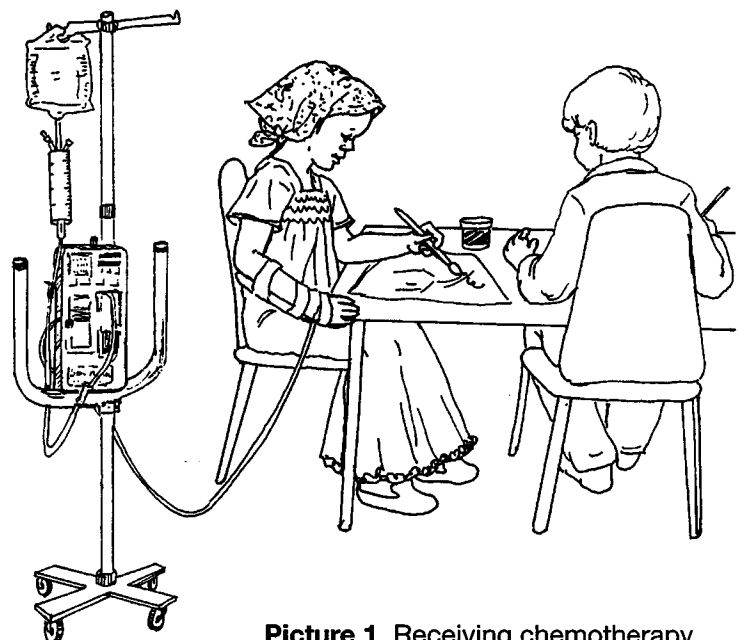
If after this treatment the tests show no sign of cancer, the *maintenance* phase is started. Maintenance therapy is intended to destroy any cancer cells that the tests cannot detect. Evaluation tests are done every few weeks to check your child's progress.

HOW CHEMOTHERAPY IS GIVEN

Chemotherapy can be given in different ways depending on the type of treatment plan your child is on. Chemotherapy can be given:

- By mouth:** Pills, capsules, or liquid
- Intravenous (I.V.):** Into the bloodstream
- Intramuscular (I.M.):** Into the muscles
- Subcutaneous (S.Q.):** Into "fatty" skin tissue
- Intrathecal (I.T.):** Into the spinal fluid

Your child's therapy plan shows how the chemotherapy will be given. Each chemotherapy medicine is given in the way that can best distribute it throughout the body to do an effective job of destroying cancer cells.



Picture 1 Receiving chemotherapy through an I.V.

SIDE EFFECTS

Anti-cancer medicines also affect normal cells that divide rapidly, such as those of the bone marrow, hair follicles, and intestinal tract. Because of this, side effects can occur in the normal tissues. The side effects, and how strongly someone reacts, are different for each person and vary from treatment to treatment. It is important to remember that each child responds differently! Your child may not have all the side effects of a particular chemotherapy medicine.

Most side effects are not permanent and will go away after chemotherapy is stopped. Side effects may occur right away or days to weeks after the chemotherapy is given. In some cases the amount of chemotherapy given the next time may need to be reduced. Sometimes side effects last longer than usual and further chemotherapy may need to be delayed. Helping Hands are available that discuss specific side effects for most chemotherapy medicines.

OTHER INFORMATION

- Your child should not have live vaccines (chickenpox, measles, and polio) during chemotherapy, and for at least 1 year after chemotherapy stops.
- Although the flu vaccine is a killed virus preparation, it is not recommended until chemotherapy has stopped for 3 to 6 months.
- Check with the hematologist before your child has any dental work done. Be sure to let your dentist know your child is receiving chemotherapy.

If you have any questions, be sure to ask your doctor or nurse.