

## Chemotherapy (outpatient): cyclophosphamide and etoposide

Your child has received chemotherapy in the clinic. There are side effects to the medicines, so it is important to know what to watch for, what to do, and when and who to call for medical help. See the education sheets “Cyclophosphamide (Cytosan®)” and “Etoposide (VP-16, VePesid®)” for more information.

At home, your child will need fluids by mouth or IV to help flush the chemotherapy from the kidneys and bladder, and medicines that help protect the bladder. Home care nursing is available to visit your home and help you learn how to give the medicines and fluids, if needed.

### What do I need to watch for?

Cyclophosphamide is a chemotherapy medicine that can cause irritation of the bladder. This irritation can cause bladder tissue damage and blood in the urine.

Etoposide can cause allergic reactions such as:

- redness in the face
- rash or hives
- fever or chills
- increased tiredness
- shortness of breath
- trouble breathing

We check for these signs when your child is in the clinic, but you will need to watch for them at home as well.

### What do I need to do?

Watch for signs of problems and call for help if they occur (see “Who and when should I call for help?” on the next page).

Mesna (Mesnex®) is a medicine given to protect the bladder. Be sure to give it on time. If the mesna is given by IV, be sure the pump is working correctly.

If the IV pump tubing comes apart:

1. Stop the pump as soon as possible.
2. Clamp the IV tubing.
3. Flush the IV line with saline.
4. Flush the IV line with heparin.

Fluids are given to flush out the kidneys and the bladder. If given by IV, check to be sure the IV fluids are infusing. Mark the tape on the bag with the time every 2 to 4 hours when you are awake, and once during the night.

Use the power pack when your child is up and moving around, or when away from home. When in one place for a while, plug the IV pump into an outlet.

Because of all the fluids, your child should need to urinate more often. Remind your child to urinate every 3 to 4 hours and before going to bed at night. If your child is in diapers, check every 3 to 4 hours to be sure he or she is urinating often enough.

If your child has an implanted port, check the needle site when your child wakes up, every 2 hours when your child is awake, and before bedtime, to make sure the needle has stayed in and that the site does not look puffy.

### **What precautions should I take?**

All caregivers should wear gloves when handling urine, stool, and vomit while your child is getting the chemotherapy infusion and for 48 hours after it is completed. Urine, stool, and vomit can be safely flushed in the sewer system and septic tanks.

Any clothing or bed linens that are contaminated with urine, stool, or vomit should be washed separately from other laundry in hot water and detergent. Anyone handling the contaminated laundry should wear gloves.

### **Who and when should I call for help?**

#### **Call the oncology clinic if:**

- vomits more than once in 24 hours
- blood in the urine
- pain when urinating
- redness in the face
- rash or itching
- fever or chills

#### **Call the home care nurse if:**

- not urinating at least every 4 hours
- IV fluid level is not going down
- pump is not functioning properly
- implanted port site looks puffy
- IV line comes apart
- implanted port needle comes out

#### **Call 911 if:**

- trouble breathing
- any other problems that you think need immediate attention

### **Questions?**

This sheet is not specific to your child, but provides general information. For more information, see the specific education sheets for your child's chemotherapy. If you have any questions or concerns, please call the oncology clinic or home care nurse.

For more reading material about this and other health topics, please call or visit the Family Resource Center library, or visit our Web site: [www.childremsmn.org](http://www.childremsmn.org).

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