**Patient Education**

**Thiotepa** (thye-oh-TEP-a)

**Brand Names**
Thioplex® (There may be other names for this medication such as TESPA, thiophosphoamide, and TSPA)

**How is it Administered?**
Thiotepa may be given intravenously (IV), which means it goes directly into a vein, or it can be delivered through a catheter (soft, flexible tube) directly into the bladder (for bladder cancer) or into a body cavity (to treat a build up of fluids).

**What is it Used For?**
Thiotepa is used to treat cancers of the bladder, ovary, or breast, Hodgkin’s and non-Hodgkin’s lymphoma, and pleural, pericardial, or peritoneal infusions (fluid build-up in the lungs, around the heart, or in the abdomen) caused by metastatic tumors.

**How Does it Work?**
Thiotepa is in a class of drugs known as alkylating agents; it slows or stops the growth of cancer cells in your body. The length of treatment depends on the types of drugs you are taking, how well your body responds to them, and the type of cancer you have.

**What Should I Tell My Doctor Before I Begin Receiving Thiotepa?**
Tell your doctor if you:
- have had an allergic reaction to thiotepa
- are pregnant, intending to have children, or are breastfeeding
- have kidney or liver disease, or any infections
- are taking any prescription or over-the-counter medications, especially aspirin and vitamins

This drug may interact with other medications, increasing or decreasing their effectiveness or causing harmful side effects. Tell your doctor and pharmacist about any prescription or over-the-counter medications, vitamins, herbal or diet supplements that you are taking.

**What Are Some Possible Side Effects I May Experience?**
- This drug may cause bone marrow depression (decreased red blood cells, white blood cells, and platelets) increasing your risk of anemia, infections, and bleeding problems.
- Thinned or brittle hair; hair loss (usually temporary; your hair should grow back when treatment is completed)
- Loss of appetite, nausea, vomiting, and/or weight loss
- Pain at the injection site
- Mouth and/or throat soreness
- Bladder irritation (when thiotepa is delivered directly into bladder)
Skin problems: rash, bronzing, redness, flakiness, and/or peeling
Decreased fertility (both men and women)

How Can I Manage These Side Effects?

To help avoid complications due to low blood counts:
- stay away from crowds or people with colds, flu, or other infections
- wash your hands often
- talk to your doctor before you have any vaccinations (immunizations), such as a flu shot
- handle sharp objects (toenail cutters, etc) carefully. Use an electric razor. Stay away from rough sports and situations where you could be bruised, cut, or injured
- be careful when using a toothbrush or dental floss (your doctor may recommend other ways to clean your teeth and gums)
- check with your doctor immediately if you notice any unusual bleeding or bruising
- Ask your doctor about medication to help prevent or lessen nausea or vomiting.
- Mouth care is very important while taking this drug. Rinse your mouth with a mixture of ½ tsp of baking soda in 8 oz of water after every meal and at bedtime. Brush your teeth and gums often with soft toothbrush. (Soften it further by running it under warm water before brushing).
- Avoid smoking, alcohol and mouthwashes that contain alcohol.
- Talk to your doctor or nurse about obtaining a wig before you experience hair loss.
- Use effective methods of birth control during your cancer treatment. Speak with your doctor or nurse about sperm or egg banking if you plan to have children.
- Vaginal lubricants can be used to lessen vaginal dryness, itching, and pain during sexual relations.

When Should I Call the Doctor?

Call your doctor as soon as possible if you experience:
- any sign of infection: fever of 100.5°F (38°C) or higher, chills, cough, sore throat, pain or burning upon urination; redness or tenderness along a vein, at an IV site, or at any other wound or skin irritation
- any sign of an allergic reaction: itching or hives, swelling in your face or hands, swelling or tingling in your mouth or throat, chest tightness, trouble breathing, dizziness, or palpitations
- unusual bruising or bleeding: bleeding lasts more than 10-15 minutes or that causes dizziness; black or bloody stools; vomit that is bloody or that looks like coffee grounds; blood in your
urine or phlegm/mucus, unusually heavy menstrual bleeding, spontaneous bleeding from your gums or nose, or superficial bleeding into the skin that appears as a rash of pinpoint-sized reddish-purple spots (petechiae)

- pain or numbness in the lower limbs
- abdominal pain

**Call your doctor as soon as possible if you have:**

- painful mouth or throat (pain, redness, swelling, or ulcers) that makes it difficult to eat or drink
- vomiting (more than 4-5 times in a 24 hour period)
- nausea or headache that is not relieved by prescribed medication or that interferes with your ability to eat or drink
- extreme fatigue (unable to carry on self-care activities)
- persistent loss of appetite or weight loss

**What Else Should I Know About Thiotepa?**

- This drug may have harmful effects on an unborn child. Use effective methods of birth control during your treatment. Genetic counseling is available for you to discuss the effect of this drug therapy on any future pregnancies.
- Do not breastfeed while you are being given this medicine.
- While you are using thiotepa, your doctor may want you to drink extra fluids so that you will pass more urine. This will help prevent kidney problems and keep your kidneys working well. Drink about ten 8-ounce (240-milliliter) glasses of fluid and urinate frequently during the first 24 hours after treatment to keep your kidneys working.
- Thiotepa may interfere with the normal menstrual cycle (period) in women and may stop sperm production in men. Do NOT, however, assume that you cannot get pregnant or that you cannot get someone else pregnant. Women who are pregnant or breast-feeding should tell their doctors before they begin taking this drug. You should not plan to have children while receiving chemotherapy or for a while after treatments. (Talk to your doctor for further details.) Use a reliable method of birth control to prevent pregnancy. Thiotepa may harm the fetus. Do not breastfeed while you are being treated with thiotepa.
- Be aware that thiotepa has been associated with the development of other types of cancers. Talk with your doctor about the potential risk of developing a new cancer.
- If you are having surgery, alert your doctor that you have taken thiotepa in the past. It may affect the type of anesthesia you receive.
Thiotepa can come through the skin as part of your sweat. Follow these guidelines for 24 hours after receiving the medication:

- The patient should bathe often, at least 5 times a day, and whenever he sweats or becomes very warm. Use only soap and water for bathing. Be sure to rinse the soap off thoroughly. Dry skin folds well and carefully. Avoid rubbing; it may injure the skin. Pat these areas dry. Bathing should begin 3–4 hours after the first dose of thiotepa.

- Change the patient’s clothes, linens, and central line dressing every time he takes a bath. Use povidone-iodine to clean the central line site while receiving thiotepa. Do not use the Choraprep® that is included in the dressing kits.

- If the patient is in diapers, change the diaper every hour. Wear gloves and do not use baby wipes. Clean the bottom with a warm moist washcloth only.

- Do not use any type of moisturizer or barrier creams during this time.

- Do not apply antiperspirants or deodorants.

- Wear gloves when handling the patient’s linens and clothing.

- All caregivers should wear long sleeves, long pants, or some type of covering, such as a small blanket, as a barrier between them and the patient’s skin.

If you would like more information about thiotepa, talk to your doctor.