Intraperitoneal (IP) Chemotherapy for Ovarian Cancer

This pamphlet is designed to provide you with information about intraperitoneal chemotherapy and will tell you what to expect during and following this type of treatment.

What is intraperitoneal (IP) chemotherapy?

Intraperitoneal (IP) therapy is treatment given directly into the abdomen or peritoneal cavity. Medicine is placed directly into the peritoneal cavity through a surgically implanted access port and catheter, which is a type of tube. Treatment is typically administered every 3 to 4 weeks and may be given alone or combined with intravenous (IV) chemotherapy. IP therapy has been in use since the 1950’s, but recent research using IP and IV chemotherapy together has shown a benefit for some women with ovarian cancer.

![Diagram of peritoneal access port and catheter]

What are the advantages of IP chemotherapy?

It is thought that IP therapy along with IV chemotherapy is more effective than IV chemotherapy alone because the IP route delivers a more continuous treatment and higher drug concentration directly into the abdomen where ovarian cancer cells are predominantly found. The chemotherapy is then slowly picked up by your bloodstream and ultimately removed from your body by your kidneys or liver (depending on the particular drug). Patients are thus receiving active treatment over a longer period of time, and it is concentrated in the most cancer-prone areas. Many studies of this method of treatment have been completed, and when compared to IV chemotherapy alone, the IP and IV combination has been shown to extend patient survival by as much as 16 months in appropriately selected patients with newly diagnosed ovarian cancer. This treatment is not for everyone however as side effects are more severe.
**Who are candidates for IP chemotherapy?**

Women with advanced ovarian cancer who have less than 1-2 centimeter pieces of cancerous tissue remaining after surgery, have no significant adhesions (intra-abdominal scarring), have had no serious surgical complications, and who have normal functioning kidneys and liver are the best candidates. IP therapy can also be used for recurrent ovarian cancer in some patients, as well. Your doctor will discuss the appropriateness of this treatment for you and your circumstances.

**When is the port and catheter inserted?**

An access port and catheter are required to get the medicine into your peritoneal cavity. This can be inserted during the initial surgery or at a separate procedure. This is most commonly placed at the time of your initial surgery but may be done when your IV port is placed if needed.

**How is IP chemotherapy given?**

For the treatment of ovarian cancer, intraperitoneal therapy may be given in the hospital or in the outpatient setting. Where you receive intraperitoneal therapy, how many treatments you receive, and the duration of therapy depends on your condition and the particular anti-cancer drug(s) your doctor has recommended. The specific recommendations for your individual situation will be reviewed by your doctor prior to beginning therapy.

Whether in the hospital or in the outpatient setting, your IP chemotherapy will be administered by a chemotherapy certified registered nurse. The day begins with an office visit with the doctor. The doctor will review your history, do an exam, and review lab work (drawn 1 or 2 days before the visit) to determine if it is appropriate for you to receive chemotherapy. If appropriate, your treatment will then be given.

Most of our patients choose to avoid hospitalization and receive their chemotherapy at the Center for Cancer Care & Research infusion center (white building across the parking lot from the Main Clinic). Most IP chemotherapy infusions can be accomplished in a few hours or less, but this is often given along with IV chemotherapy as noted previously. Some IV chemotherapy medications only require a few minutes to a few hours for infusion, but others are given over 24 hours. When IP chemotherapy is given with an IV drug that requires a 24-hour infusion, this can still be accomplished without hospitalization.

When the IV chemotherapy medication requires a prolonged infusion, your infusion will be started and then monitored for a brief time at our infusion center to be certain all is going as planned; you will receive the remainder of your IV chemotherapy via an automatic infusion pump at home. This is very safe and easy and requires no home nursing care. You will return to the infusion center the following day to have your pump disconnected. Your IP infusion is then given on this second day, and it may require as long as 6 hours. For shorter IV chemotherapy infusions, we may be able to give both the IV treatment and the IP treatment on the same day.

During the IP infusion, you will be asked to turn from side to side to help the chemotherapy solution mix well within your abdomen. Once your IP treatment is completed, you will be allowed to return home. Your abdomen will be distended with chemotherapy fluid, but this does not affect whom you can be around. Your diet and activity level are based on your own tolerance as well. Your abdominal swelling will resolve over the next 24-72 hours. Depending on the chemotherapy drugs that are given, you may be asked to return for additional intravenous fluids on the following days. Some regimens also call for an additional IP infusion during the second week of treatment as well.
Alternatively, you would be hospitalized for as long as 3 to 5 days to receive this same regimen of chemotherapy. You may still require return trips to our infusion center for hydration even if hospitalized. If a second week IP infusion is required, this would not require hospital stay and would be given at our infusion center.

Whether treatment is given at our infusion center or in the office, this process will continue every 3 to 4 weeks for the duration of your therapy (6 cycles during primary treatment). The doctor will review all of the details of your specific treatment plan prior to your first infusion—how long infusions will take, when you will get treatments, how often treatments will be given, and how many treatment cycles you will require. The potential side effects of treatment will of course be reviewed as well.

What are the side effects of IP chemotherapy?

Because you are exposed to chemotherapy medications for longer periods of time (takes longer for your body to eliminate the drug from your peritoneal cavity), IP therapy tends to have more significant side effects compared to IV therapy. Catheter related problems can also occur. Specific side effects are the same whether the drug is given IV or IP, but symptoms may be more severe after the drug is given IP (compared to IV) such as an increased risk of infection, abdominal pressure and bloating, frequent urination, nausea, decrease in appetite, and fatigue. Some women may find the side effects to be a barrier to completing IP therapy, but treatment adjustments will be made as necessary. Women receiving IP chemotherapy report a reduction in their quality-of-life compared to those undergoing IV chemotherapy; however, when contacted a year later, these same women reported the same quality-of-life as those women who received only IV therapy. In other words, immediate side effects are more severe with IP chemotherapy, but the side effects seem to resolve over time to at least a level comparable to what women who receive only IV chemotherapy.

Comfort measures to minimize side effects of IP chemotherapy

- **Abdominal pressure and bloating** (caused by large volume of fluid infused into the peritoneal space) - Walk around after the treatment is completed. Wear comfortable clothing with an expandable waistline, especially for the first few days after treatment.
- **Frequent urination/bladder fullness** (a desired effect caused by the intravenous fluids administered with your IP treatment) - Empty your bladder just before beginning treatment. You will be allowed to use the restroom during the treatment as needed. Be sure to void frequently after returning home as well.
- **Breathing faster or more frequently** (caused by distention of the abdominal cavity due to the IP chemotherapy infusion volume) - Elevate the head of your bed during and following treatment. Walk around after the treatment. Sit in an upright chair after the treatment.
- **Nausea, vomiting, or both** (caused by anti-cancer drugs) - Anti-nausea medicine will be given to you before therapy. Your doctor will also prescribe antinausea medicine for you to take at home as needed.
- **Decrease in appetite** (caused by distention of the abdominal cavity due to the IP chemotherapy infusion volume and the anti-cancer drugs themselves) - Eat smaller meals more frequently. Drink high nutrition liquid supplements like Boost or Ensure.

What to do at home to prepare for your IP chemotherapy

- Wear expandable or loose-fitting clothing when coming in for treatment.
- Eat a light dinner the night before and a light breakfast the morning of the treatment.
A television is provided in the room where you will receive your treatment, however, you may also bring your CD player, ipod, crossword puzzles, books, etc.

It may be helpful to have a relative or friend accompany you as some medications may make you feel drowsy, and assistance driving home may be required.

**Questions regarding your CADD-Legacy Pump (24 hour infusion pump)**

You will receive additional information and an orientation on your pump at your initial chemotherapy session. However, if questions or problems arise, a certified chemotherapy registered nurse from our infusion center will be on call to help. To reach them—call 863-603-4730, and you will be directed to the call center. Ask the receptionist to please page the chemotherapy nurse on call. If you do not receive a return call within a reasonable amount of time, please call again.

**What you need to know about caring for the peritoneal port**

- Since the peritoneal access port is located under your skin, no covering or bandage is required.
- You may shower or bathe as you typically do.
- Having a port and catheter in place should not restrict your activities. Reasonable exercise is allowed after the incision has healed and your recovery from your cancer surgery is complete. Ask your doctor or nurse about resuming your normal activities.
- If the skin around your port becomes reddened, swollen, or unusually tender to the touch, you should report this to your doctor or nurse.
- The port and catheter do not affect your dietary habits. You may continue on the diet with which you normally eat.
- Once your treatment cycles have all been completed, your doctor will discuss removal of your IP port.

**When you should notify your doctor** – Call your doctor at 863-680-7578 if you:

- Experience unusual abdominal pain.
- Have a fever of 100.5 degrees Fahrenheit (38.0 degrees Celsius) or higher.
- Develop redness, swelling, or new tenderness around the port site.
- Have severe nausea, vomiting, diarrhea, or constipation that lasts more than 24 hours.
- Are unable to eat or drink for more than 24 hours.
- Have any unexpected or unexplained problems.