



Chemotherapy Orientation

- Oncology Team
- Generalized Symptom Management
- Social Services
- Nutrition
- Questions and Answers



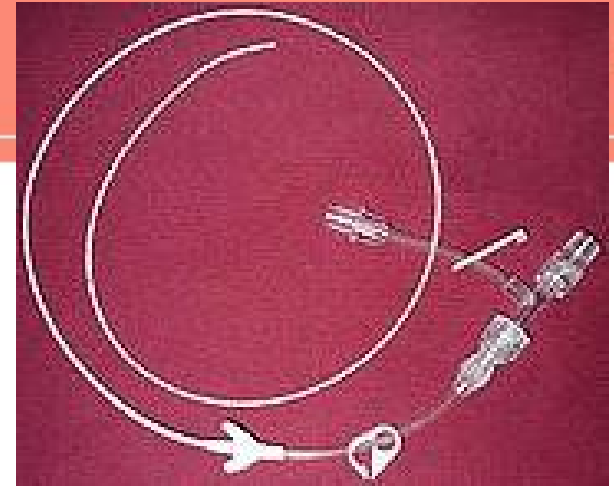
- 7 Oncologists/Hematologists
- 20+ Nurses (all chemo-certified)
- 2 Case Managers
- 1 Social Worker
- 8 Oncology pharmacists/2 technicians
- 10 Medical Assistants



- Chemotherapy treatments
- Injections
- IV fluid hydration
- Blood transfusions
- Management of central lines



What is a PICC Line?



- A **peripherally inserted central catheter (PICC or PIC line)** is a form of intravenous access that can be used for a prolonged period of time, e.g., for long chemotherapy regimens, extended antibiotic therapy, or total parenteral nutrition (TPN).
- A PICC is inserted in a peripheral vein of the arm, and then advanced through increasingly larger veins, toward the heart until the tip rests in the distal superior vena cava.
- PICC lines need to be flushed periodically, usually once a day. The nurse will instruct you on care. The cover dressing also needs to be changed once a week, this may be completed at home or in the infusion center by appointment.



• “INFUSA” PORT



- An infusion **port** (**portacath, InfusAPort, MediPort**) is a small medical appliance that is installed beneath the skin of the upper chest. A catheter connects the port to a vein. Under the skin, the port has a rubber disk (a septum) through which medications can be infused and blood samples can be drawn. Use of an infusa port is often less painful than a typical needle stick in the arm.
- An infusa port may be used for chemotherapy, fluid hydration, blood transfusion, antibiotics, other intravenous medications and blood draws.
- An infusa port **MUST** be flushed once a month when it is not being used for routine infusions. This is done by our infusion center nurses.



We have

- 29 Infusion Stations
- Free Wi-Fi access and TVs available
- Space for 1 person to be with you during your infusion



- 408-851-4325
- Open 7 days a week except major holidays
- Monday thru Friday 9AM- 8:30PM
- Sat and Sun 9AM – 5 PM



- No one under the age of 14
 - Talk your nurse/doctor about exceptions
- No perfume or cologne
- No odorous food



On the day of the treatment

- Do not skip any meals at home
- Wear loose clothing so the nurse can access your arm for IVs
- Check in at Dept 440 and a staff member will take you to the infusion chair at the scheduled time
- Juice and crackers for snacks are available.



Bringing food to the Infusion Center

- We have two microwaves available for patient use.
 - Sorry, no fish allowed in microwave
- We have a refrigerator and freezer available for patient use.
 - Please label any food with your name and date.
- Please remove your food at the end of each visit.



- What is chemotherapy?
- Chemo cycle
- M.D. appointments
- Blood Tests/Labs
- Nutrition
- Liquids
- Anti-nausea medications



- Any drug(s) used to treat cancer
- Many chemotherapy drugs are infused into the vein through an IV
- Others are given by mouth or by injection
- Treatments are individualized and your doctor will discuss the best treatment for you



- Based on your height and weight
- Let your doctor or chemo nurse know if you lost or gained more than 10 lbs since your last treatment



What is a chemo cycle?

A cycle may involve several treatments.

Some examples of a cycle:

- One treatment every 2-4 weeks
- Every week for 2 – 3 weeks followed by one week of rest
- Daily treatment for 5-7 days every 3-4 weeks



- Frequency as directed by your doctor and your needs
- If you have problems during treatment, let your doctor know or ask for an appointment
- A family member, significant other or support person is welcome at your appointments



- Usually necessary before each treatment to make sure your blood counts have recovered
- To be completed 1-2 days before treatment
- Lab work can usually be done at any Kaiser facility (Homestead, Milpitas, Campbell, Mountain View) EXCEPT blood transfusion labs need to be done at the Homestead facility
- No lab slip needed. Orders are transmitted electronically



- Low blood counts
- Hair loss
 - DO not dye or perm DURING treatment
 - Dye or perm 6 months AFTER last chemo
- Nausea
- Fatigue
- Loss of appetite



- Low WBC (neutropenia)
- Low RBC (anemia)
- Low platelets (thrombocytopenia)



Things to know about neutropenia

- Hand-washing
- Fruits/Vegetables
- Crowds
- People who are ill
- Temperature (call if >100.5 F)
- Dentist appointment (check with your doctor before scheduling)
- Pets
- Use Common Sense
- Consider Pneumovax (Pneumonia vaccination)



How do you know you are anemic?

- Dizziness especially when you stand too quickly
- Shortness of breath especially with walking
- Pale-looking
- May cause chest pain-Contact your doctor ASAP for chest pain
- Fatigue (but this could be from chemotherapy or cancer itself)
- Rapid heart rate

Your doctor may talk to you about blood transfusions or injections to stimulate red blood cell production



Blood Cell Count

White Blood Cells

Red Blood Cells

Hemoglobin

Hematocrit

MCV

Platelet Count



- Ignore Red Blood Cell number
 - Hemoglobin or hematocrit is a better indicator of your anemia
- Anemia is usually not due to iron deficiency but rather from the lack of red blood cells due to the chemo itself
- Diet or vitamin supplement will not improve the blood counts more quickly



Low Platelets

- Unexplained bruising
- Nose bleeds
- Bleeding gums
- Avoid aspirin-like products (Ibuprofen, Motrin, Advil, Aleve). Always use acetaminophen (Tylenol) for pain or fever. If not effective, contact your doctor
- Talk to your doctor about using aspirin or aspirin-like products



- Hair loss is temporary (not all chemo causes hair loss)
- Usually starts between the first and second treatment (the first sign is tingling of the scalp)
- Hair loss can occur on all parts of the body
- Will start to grow back within several weeks after stopping chemo and should be fully back about 3-4 months after stopping treatment
- Hair may come back curlier than your usual hair but will eventually regain characteristics of the hair you had before chemo



Tips to deal with hair loss

- Shop for hair covers/wigs before hair loss starts
- Natural hair wigs are more expensive and require more work to maintain
- Use hair net at night to contain hair
- May want to cut your hair short before it falls out
- Hair dyes or perms not recommended while on chemo--wait six months. Do a patch test first!
- Use gentle cream or lotion on your scalp when it is dry
- Use soft hair brushes



- Take your prescribed meds at the first sign of nausea and regularly. You may need to take two or more kinds of nausea medications
- Eat small meals/crackers/dry toast
- Avoid fatty/fried foods
- Stay well hydrated
- Avoid unpleasant odors/tastes



- Please bring all prescribed medications from your Oncologist to the first day of chemotherapy
- Take all medications as directed
- Many are constipating, to combat this use:
 - Colace, Senokot
 - Increase fluids/fiber
 - Do not use enemas



Mouth sores

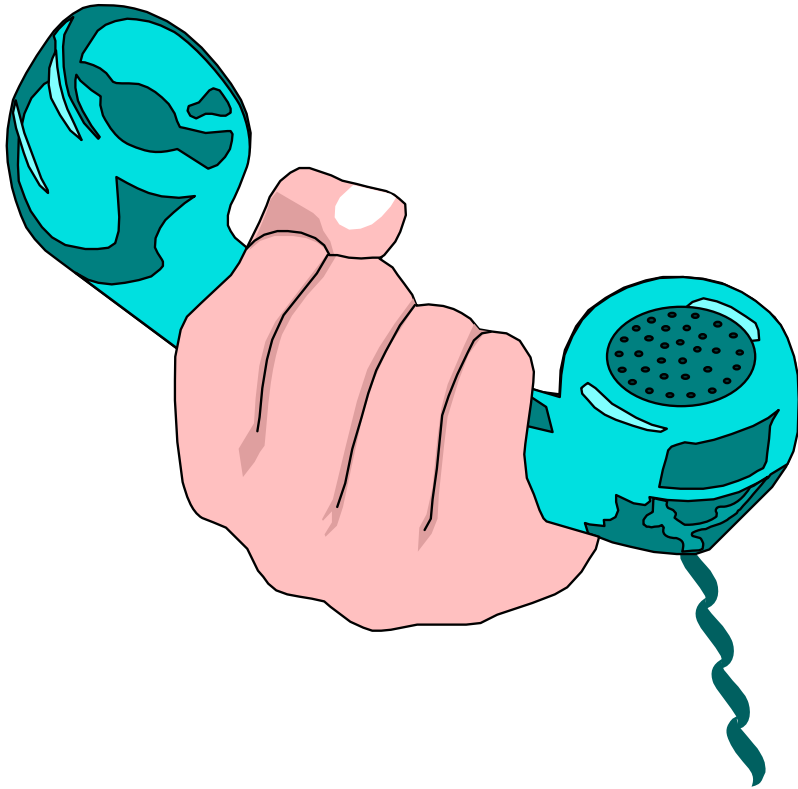
- Use soft toothbrush
- Floss very gently
- Rinse mouth frequently
- Salt water rinses every two to four hours
 - 8 oz warm water
 - $\frac{1}{4}$ tsp salt and baking soda
- Avoid alcohol-based mouth washes (Listerine)



Symptoms to report

- **Fever over 100.5,
Good thermometer
(chills without fever
can be a sign of
infection)**
- **Uncontrolled or new
pain**
- **Diarrhea**
- **Constipation**
- **Mouth sores**
- **Burning with urination**





- **Excessive vomiting (more than 3 times in 12 hours)**
- **No fluid intake for over 12 hours**
- **Bleeding or excessive bruising**
- **Shortness or breath/dizziness**
- **Difficulty swallowing**



Oncology Pharmacy Program

- Nausea and low blood counts are common side effects of chemotherapy
- Pharmacists may be involved in the management of:
 - Your nausea
 - Low blood counts by prescribing you Procrit or Neupogen injections according to set protocols



Fatigue and Activity



- Many treatments can cause fatigue
- Planned rest periods
- Exercise
- Pacing of activities
- **Listen to your body** (if you are tired, rest; if you feel good, resume normal activities)



- **Anzonette Pittet, RD 408 851-8026**
- **Adult Nutrition Advice line:
408 851-1762**



- Importance of Good Nutrition
 - Support immunity
 - Help maintain weight
 - Help maintain energy
 - Decrease adverse effects of treatment
 - Expedite recovery period



- Balanced diet to provide calories, protein, vitamins & minerals:
 - Fruits
 - Vegetables
 - Grains
 - Protein foods
- Eat a variety of foods
- Must have adequate calories & protein daily



Protein

- Protein is required to rebuild cells/tissue
- Food sources of protein:
 - Beans, cottage cheese, milk products, fish, poultry, lean meats, eggs
- Protein/supplement drinks (ex: Boost, Ensure, Carnation Instant Breakfast)

Healthy Fats

- Good source of Energy
- Ex: Olive oil, canola oil, flax meal/oil, avocado, nuts, seeds, salmon



Liquids

- Drink two quarts of fluids a day
- Any type of fluid
 - Soup, juice, bouillon, Jell-o[®], sports drinks like Gatorade[®], non-caffeinated teas
- Important one day before and two days after chemotherapy
- Fluids flush the system
- Avoid beverages with caffeine/alcohol
- Stay well hydrated



Multivitamins/ Supplements

- Antioxidants:
 - Obtained from fruits, vegetables, whole grains
 - Protect our cells
 - Examples: vitamins C, E, and A (beta-carotene), selenium, lycopene
- Avoid supplements with greater than 100% RDI of antioxidants during cancer treatment
- Unlikely to overdose on antioxidants through food intake
- Herbal supplements (Consult M.D.)



Concerns with Herbal Supplements

- Can interact with chemotherapy (e.g. St. John's Wort can decrease the effectiveness of certain chemotherapies; others can increase the toxicity)
- Quality control (variability in biological potency; use of incorrect plant species)
- Contaminants (bacterial, fungal and also heavy metals): Just because it is made in US does not mean that the ingredients are also from US. Many are from other countries.



Important reminder about herbs and chemotherapy

- Many useful drugs are initially discovered in plants and herbs
- Do not assume that the reverse is true: herbs help fight cancer/treat symptoms (be skeptical about claims made on Internet based on individual testimonies)
- *Safer* to assume that most herbs can cause interaction with chemotherapy (very little safety data)
- Consult with your doctor **FIRST**



- **Thoroughly wash hands & food preparation area**
- **Thoroughly wash all raw fruits & vegetables**
- **Avoid raw or undercooked meats, poultry, fish, seafood, and eggs**
- **Network with family, friends, and neighbors**
 - **Help with grocery shopping**
 - **Prepare meals that you can store in freezer**





Infusion Center

Physical layout of Center



06/05/2007 14:15



06/05/2007 14:09



06/05/2007 14:12

06/05/2007 14:12



- Susan Tilton, LCSW
- Disability forms go to Business Office
 - First Floor: Dept 160



Getting a cancer diagnosis and starting chemotherapy can be overwhelming. People respond to treatments differently. You are not alone and we are all here to help you. Do not be afraid to ask questions and to ask for help.

