

## **Pediatric Oncology**

#### **Contact information and hours**

University of Iowa Stead Family Children's Hospital 200 Hawkins Drive Iowa City, Iowa 52242

Fax: 319-356-7659

Call 319-356-2229 to make an appointment.

Clinic hours: 8 a.m. to 5 p.m. Monday through Friday

## **Our providers**

Our team has many providers. Each person specializes in different pediatric hematology or oncology diagnosis. We believe that each one of them brings something unique and special to University of Iowa Stead Family Children's Hospital.

Within 1 week of your child being seen in the hospital or clinic, a doctor who specializes in your child's hematology or oncology diagnosis will become your primary doctor.

Your primary doctor:

- Leads the plan of care
- Coordinates with other specialists, such as surgeons or radiologists
- Talks about your child's care plan with the whole team to keep them updated on your child's progress

During your child's treatment, you will have the opportunity to work with most of our team.

Our team is committed to delivering the best care possible in a professional, consistent, and caring manner. Please let us know if you feel we can do better.

## **Getting ready for appointments**

- Put EMLA/LMX cream on your child's port and cover with press-n-seal or Tegaderm **before** you come to clinic if you have chemotherapy, labs, or a procedure scheduled.
- Always bring your child's medicines.

#### Your visit

- 1. Register at the front desk.
- 2. When your child's name is called, he/she will be weighed and measured. We will get their blood pressure, heart rate, temperature, and respiratory rate.
- 3. Your child will have labs drawn or go into an exam room where a nurse or medical assistant will go over the medicines and any problems or concerns you have.
- 4. A provider will be in to see your child.
- 5. The nurse or doctor will write:
  - Prescriptions
  - Letters
  - Appointment requests

Your doctor may ask you to, or you may choose to, wait in the waiting room for your child's test results. A person from your child's care team will talk with you about the test results as soon as they are available.

#### Checkout

The checkout person will help you:

- Make your child's follow-up appointments
- Schedule tests or scans

Please be sure to tell us if your contact information has changed before you leave.



## Fever, infection, and visiting the Emergency Department

Children with cancer are more at risk for infections. The risk is even greater if your child has low neutrophil counts. You should know the early signs of infection.

Fever is one of the most reliable signs of infection. If your child has a fever, he/she needs medical care right away. Check **your child's** temperature any time **he/she** is warm to the touch, shivering, or is just not feeling well.

#### Call if your child's temperature is:

- At or above 101 degrees **Fahrenheit** or 38.3 degrees **Celsius once**
- 100.4 to 100.9 degrees Fahrenheit 2 times at least 1 hour apart in 24 hours

When you call, you will be asked to go the closest emergency department to be seen. The doctor will call that emergency department to tell them:

- Your child will be coming
- Labs to check
- Antibiotics to give

Put on EMLA/LMX cream **before** you leave home if your child has a port. It will most likely need to be accessed.

Your child may need to be admitted to the hospital to keep getting antibiotics.

Never give your child Tylenol for a fever unless instructed by your child's doctor.

## Immunizations and exposures

Talk with your child's doctor about immunizations. They will be given per current guidelines.

Brothers and sisters should get all of their immunizations. All family and friends who will be near your child should get a flu shot.

Call your pediatric hematology/oncology doctor right away if your child:

- Is exposed to chicken pox, shingles, measles, mumps, rubella, or hepatitis
- Has chicken pox, shingles, or cold sores



## Hygiene and mouth care

Good hygiene is important for any child. It is very important for a child getting chemotherapy.

- Hand washing is the best way to prevent illness.
- Your child needs mouth care.
  - O Your child should brush his/her teeth with a soft toothbrush or toothette sponge 2 times each day.
  - Wrap a soft cloth around your finger and gently wipe your infant's teeth and gums with water.
  - o Use lip balm or ointment to keep lips moist.
- Your child should have regular visits to a dentist.
  - o Please tell your doctor before your child goes to the dentist. Your child will need antibiotics if he/she has a port or central line.
- Some chemotherapy can cause your child to have mouth sores. The sores can be in the mouth or digestive tract. Medicines can be used to help with the discomfort.

#### **School**

Going to school is good for your child's sense of well-being. It is a sign of a normal routine.

We have a teacher that can work with your child while he/she is in the hospital. This will also help your child stay caught up with their school work.

Ask your child's doctor when it would be safe for your child to go back to school.

## **Activity and exercise**

Your child should live as normal and active a life as possible. They can do whatever they enjoy if they feel well.

If your child's platelet counts are low, they should not do activities that might involve knocks and bumps to help prevent bleeding.

Children that have ports should not lift heavy weights in a weight lifting program.

Please talk with your child's doctor before starting, stopping, or changing an exercise program.



## Safe handling of chemotherapy

The guidelines below are for the safety of those living with a person getting chemotherapy:

- Keep chemotherapy, items in direct contact with it, and body fluids from a person getting it out of reach of children and pets.
- Wear gloves when handling chemotherapy, whether it is through the IV, as a shot, or in pill form.
- Wash your hands with soap and water after you take your gloves off.
- Return all unused chemotherapy to the clinic or pharmacy you got it from. Do **not** throw it in the trash or into a water supply.
- If you are a pregnant woman, do **not**:
  - o Handle chemotherapy
  - o Have direct contact with body fluids from a person getting chemotherapy
- Body fluids should be handled with special care for 48 hours after a dose of chemotherapy is given:
  - o Do not eat or drink with the same utensils or cup as the person getting chemotherapy.
  - o Wear gloves when handling body fluids, diapers, urinals, vomit basins, or dirty linens
  - o Carry dirty linens away from your body. Wash them right away in hot water separately from other laundry.
- Other items that have come in contact with chemotherapy should be washed well with soap and water.
- Wash your skin with soap and water if you come in contact with chemotherapy.



#### **Blood Counts**

<ul> <li>Red blood cells</li> <li>Carry oxygen to the body</li> <li>Allow food to be used for energy</li> <li>Provide color to skin and nail beds</li> <li>Measured as hemoglobin (HGB or HB)</li> </ul>	Normal level  • Greater than 12 grams  OK level  • Greater than 7 grams	<ul> <li>Special care for low levels</li> <li>Watch for signs, such as feeling very tired with no energy, very irritable, and pale cheeks and lips.</li> <li>Watch for signs of a very low level, such as headaches, dizziness, fast heart rate, or shortness of breath.</li> <li>Have rest periods</li> <li>May need a blood transfusion</li> </ul>
Platelets • Prevent internal bleeding • Help clotting with injury • Measured as platelets (PLT)	Normal level  150,000 to 400,000 (150 to 400 K)  OK level  Greater than 100,000 (100 K)  Low level  Less than 50,000 (50 K)	<ul> <li>Special care for low levels</li> <li>Watch for signs of internal bleeding, such as: <ul> <li>Easy or bad bruising</li> <li>Unusual bleeding (petechiae)</li> <li>Bleeding longer than normal</li> <li>Bleeding longer than normal with menstrual period</li> <li>Blood in urine, stool (poop), or vomit (throw up)</li> </ul> </li> <li>Put pressure on an area of bleeding for <ul> <li>to 20 minutes to stop it.</li> </ul> </li> <li>May need a platelet transfusion</li> </ul>
<ul> <li>White blood cells</li> <li>Fight infections</li> <li>Measured as white blood cells (WBC)</li> </ul>	Normal level • 4,000 to 12,000 (4 to 12 K)	<ul> <li>Special care for low levels</li> <li>Watch for a fever (1 temperature above 101° F or 2 temperatures above 100.4° F at least 1 hour apart in 24 hours)</li> <li>Do not give Tylenol for a fever.</li> <li>Watch wounds for signs of infection, such as: <ul> <li>Redness</li> <li>Tenderness</li> <li>Warmth</li> <li>Swelling</li> <li>Drainage</li> </ul> </li> </ul>
Neutrophils  • A type of white blood cell that fights bacterial infections  • Also called Segs (mature) and Bands (young)	Normal level  • 1550 to 6500  OK level  • Greater than 1000  Low level	WBC × the percent of neutrophils in the differential blood test = the Absolute Neutrophil Count (ANC)  Segs + Bands = ANC



## **Blood products and transfusions**

The decision to give your child a blood product (transfusion) is made on a case-by-case basis. It is based on:

- Blood cell levels
- Your child's diagnosis

Your child's doctor will talk with you if your child may need a transfusion. If your child needs a spinal tap or other procedure, such as surgery, a blood or platelet transfusion may be needed to make the procedure safer.

If a transfusion is needed, your child may go to the clinic or inpatient unit to get it.

#### **Nutrition**

Good nutrition and getting the right amount of protein and calories in your child's diet are important to build new healthy tissues.

Try to avoid empty calorie foods, such as:

- Snacks
- Candy
- Pop

These make your child less hungry and do not have the needed nutrients.

Ideas and tips for healthy foods that offer extra calories, protein, and nutrients are:

- Milk shakes
- Yogurt
- Juice box
- Fruit
- Instant breakfast
- Well-seasoned foods
  - o These will help if your child is less hungry than normal or has taste changes that are common after chemotherapy is given.



Talk to your child's doctor before starting any nutritional supplement or vitamin. Some supplements change the way chemotherapy works; it may not work right and can be harmful. A normal diet gives your child the right amount of nutrients. Do **not** limit your child's diet until you talk with their doctor.

## Nausea and vomiting

Many chemotherapies cause nausea and vomiting. We can prescribe medicines called antiemetics to help. Call your child's doctor if he/she has:

- A lot of vomiting
- Blood in the vomit

#### **Medicines**

Do **not** start giving your child any new medicines without talking with your doctor. Some medicines:

- Change the way chemotherapy works
- Can cause your child to bleed more or longer than normal, such as aspirin and ibuprofen

Keep track of all prescribed and over-the-counter medicines your child takes. Share this with your child's nurse and doctor.



## **Emergencies**

#### Call your doctor if your child has:

#### Signs of infection

- o Fever. Check your child's temperature any time he/she is warm to the touch, shivering, or just not feeling well. Call if your child's temperature is:
  - At or above 101 degrees Fahrenheit or 38.3 degrees Celsius once
  - 100.4 to 100.9 degrees Fahrenheit 2 times at least 1 hour apart in 24 hours
- o Shivering and fever, especially after the central line or port is flushed
- Redness, warmth, swelling, and/or pain at any break in the skin. You may or may not see drainage (pus).
- o Sores in the rectal area
- Very bad headaches and/or a very bad cough
- o Pain or burning with urination (peeing) or feelings of having to pee often
- o Constant headache and/or stiff neck and fever, especially if your child is having spinal taps done

#### • Exposure to or signs of infectious diseases

- o Exposure to chicken pox, shingles, measles, mumps, rubella, or hepatitis
- o Signs of chicken pox, shingles, or cold sores

#### Signs of bleeding

- Bleeding that is not normal
- o Bleeding that cannot be stopped after 5 to 20 minutes of pressure
- o Easy or bad bruising or petechiae (small spots due to bleeding in the skin) not due to trauma
- o Signs of internal bleeding, such as blood in the urine, in stool (poop), or in vomit (throw up)
- o A headache that does not get better with Tylenol<sup>®</sup>, especially if your child becomes more sleepy or hard to wake up
- o Heavier or longer than normal menstrual bleeding or passing large clots

## • Signs of very bad anemia

- Very pale cheeks and lips
- Very tired with no energy
- Very irritable
- o Complaints of dizziness, headaches, heart pounding, or shortness of breath with light activity

#### Signs of an allergic reaction

- o Rash or hives over any part of the body. **Call first**, do not bring them right to clinic.
- Shortness of breath or wheezing
- Redness or swelling at injection sites



#### Signs of dehydration

- o Nausea and vomiting that last longer than 8 hours
- Not able to keep liquids down
- o No urine out for 8 hours or very little urine that is dark yellow or foul-smelling in 8 hours
- o Diarrhea stools (poop)
  - 1 or more an hour for 4 hours
  - 5 large, watery stools in 24 hours
- o Crying with no tears
- Mouth and lips are dry
- o Very weak and wants to sleep all the time

#### Other signs or symptoms that need care right away

- o Very bad stomach pain after green (bile), forceful, or early morning vomiting
- o Very bad stomach pain or a swollen abdomen
- o Vomiting any chemotherapy medicine
- o Not able to keep prescribed medicines down 2 times in a row
- Very bad mouth sores that make it hard for your child to drink
- o Very bad constipation: 3 days with no stools after taking a laxative
- Very bad sunburn
- o Pain, redness, or blister at the site where chemotherapy was given
- o Any pain that does **not** get better after taking Tylenol or prescribed pain medicines
  - Always check your child's temperature before giving Tylenol. Never give Tylenol if your child has a fever.

#### Call:

- Nurse triage line at **319-356-8223** Monday through Friday 8 a.m. to 4:30 p.m.
- Hospital operator at 319-356-1616 after 4:30 p.m. on weekdays, weekends, or holidays. Ask to talk to the pediatric hematology/oncology staff physician on call.
- Toll free: University of Iowa Stead Family Children's Hospital at 1-888-573-5437 any time.

Ask your doctor about the Children's Oncology Group Family Handbook to learn more about your child's diagnosis, treatment, and general well-being.



William Terry, MD



David Dickens, MD



Yatin Vyas, MD, MBBS



David Gordon, MD, PhD

# Pediatric Hematology and Oncology Doctors



Jessica Zimmerman, MD



David A. Claassen, MD, PhD



Mariko Sato, MD, PhD



Anjali Sharathkumar, MD, MBBS



Janice Staber, MD



## **Hematology and Oncology**

## Physician assistant



Steve Rumelhart

**Nurses** 

Amber Reiten Jenna Gimre Lynsey Paulson

Social worker

Ashley Jackson

## **Psychologist**

Amanda Grafft

## **Nurse practitioners**



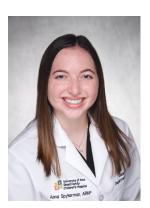
Mary Schlapkohl



Kristi Foster



Alexandra Telford



Anna Spykerman



Laura Ramsey



Jodi Stedman