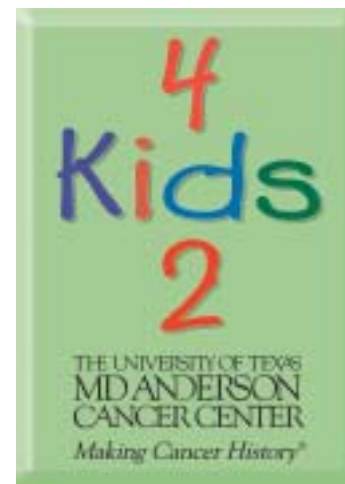


September is
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Cancer & Blood Diseases

NEWSLETTER

SEPTEMBER
2003

FROM THE DIVISION OF PEDIATRICS AT THE UNIVERSITY OF TEXAS M. D. ANDERSON CANCER CENTER

Drug Therapy Corner – Susannah Koontz, PharmD

Itraconazole (Sporanox) is a synthetic triazole antifungal agent approved for empiric therapy of febrile neutropenia and the treatment of other fungal infections in immunocompromised patients. Non-oncologic applications include the treatment of onychomycosis due to *Tinea unguium*. The drug is supplied in the form of a 100 mg capsule, 10 mg/ml oral solution and 10 mg/ml solution for injection. The oral solution provides more reliable absorption than the capsule and is dosed as 3-5 mg/kg/day in 1-2 divided doses in pediatric patients (maximum daily dose dependent upon type of infection). Itraconazole solution is best taken on an empty stomach, if tolerated; the capsule should be taken with food. Acid is needed for itraconazole absorption, so patients taking acid suppressors or neutralizers should be

instructed to take their dose with cola. Common (>1%) side effects of itraconazole include nausea, vomiting, diarrhea, rash, hypokalemia and elevated liver function tests. Concomitant use of drugs metabolized by the CYP3A4 liver enzyme system (e.g., cisapride, pimozide, quinidine, dofetilide, midazolam, triazolam, lovastatin, simvastatin, etc.) with itraconazole is contraindicated due to the potential for adverse cardiovascular events (prolongation of the QT interval). The best recognized drug interactions that have been documented with itraconazole are phenytoin, phenobarbital, carbamazepine, tacrolimus, cyclosporin, warfarin, indinavir, ritonavir, saquinavir, isoniazid, rifabutin, rifampin, clarithromycin and erythromycin.

WELCOME

to the quarterly newsletter from the Division of Pediatrics at M. D. Anderson Cancer Center.

We welcome your questions and suggestions.

Please contact: Seth Corey, MD
Email: sjcorey@mdanderson.org

The Cancer & Blood Diseases Newsletter is an educational resource for physicians interested in the treatment, research and prevention of pediatric cancers, published four times per year. Change of address should be sent to 1515 Holcombe Blvd. Unit 087, Houston, TX 77030

Communication regarding the newsletter may be directed to David Coe at the above address or 713-792-6620.

Child & Adolescent Center at M. D. Anderson Cancer Center

Our Mission

The Child & Adolescent Center's mission is to treat the whole child, not just the cancer.

Each patient has a team of treatment specialists to address any cancer-related issues, whether they are medical, psychological or developmental. Treatments are designed for minimal interference to your child's normal routine. Because a familiar face means so much to a child, they will see the same physician throughout their treatment. Patient and families always know who "their" doctor is.

We also make sure that life after cancer is the best it can be. Follow-up programs monitor and manage any side effects of cancer or its treatments. Counseling and support groups help the parents and the child overcome any fears and concerns.

At the Child & Adolescent Center, kids rule – not cancer. We wouldn't have it any other way.

Contact us at 713-792-5410
8:00 A.M. – 5:00 P.M. (M-F)
and After Hours at 713-792-7090
Request the On-call
Pediatric Oncology Attending

We're on the Web!
www.mdanderson.org/4kids2

About the Division – Eugenie Kleinerman, MD, Head, Division of Pediatrics

The University of Texas M. D. Anderson Cancer Center is one of the few comprehensive cancer facilities in the country devoted to treating all childhood and adolescent cancers. At M. D. Anderson we know cancer AND we know kids.

Our patients have access to tomorrow's therapies today, the most up to date technologies for cancer diagnosis and treatment, and the latest breakthroughs in surgery, chemotherapy and radiation therapy. Fine needle biopsy techniques and fiberoptic endoscopic procedures are utilized for solid tumors, avoiding a surgical procedure for diagnostic purposes.

Our pediatric surgeons, radiologists, pathologists, and radiotherapists specialize in cancer. We have faculty with expertise in pediatric critical care, neurology, endocrinology, and nephrology. Many of these physicians are board certified in both pediatrics

and internal medicine, offering a particular advantage to the adolescent and young adult age group. Experts in pathology provide accurate diagnosis in days rather than weeks. Our patients benefit from the pipeline of new agents available through the adult programs at M. D. Anderson, acknowledged as the best place to receive cancer care. The Child and Adolescent Center at M. D. Anderson provides that same medical expertise for young cancer patients in a caring environment. The University of Texas M. D. Anderson Cancer Center is Making Cancer History for kids too (*4 Kids 2*).

Adolescent Leukemia – Seth Corey, MD, MPH

Should adolescents with ALL be treated as old children or young adults?

A recent Journal of Clinical Oncology article (21:774, 2003) and an American study reported at the 2000 American Society of Hematology meeting concluded that adolescents treated on pediatric protocols had a better event-free survival (67% v. 41%). In an accompanying editorial, Dr. Schiffer suggested that dose-intensity, physician

experience with ALL, the availability of support teams, patient compliance, and strict protocol adherence might account for the improvement. At MDACC, we have a special Adolescent and Young Adult (AYA) program. Here, pediatric and adult physicians collaborate to provide the best and latest treatments.

Managing an Enlarged Lymph Node – Renee Madden, MD, MS

Lymph node enlargement is a common pediatric finding.

DEFINITION:

- Normal nodes (or shotty lymph nodes) are < 3 mm, mobile, nontender, and distinct
- Enlarged lymph nodes > 10 mm in diameter (epitrochlear nodes >5 mm, inguinal nodes >15 mm)
- Epitrochlear or supraclavicular lymphadenopathy is abnormal

EVALUATION:

- Time nodes present
- Nodal characteristics (size, single/matted, consistency, fluctuant, firm, color, pain, location)
- Associated systemic symptoms
- Recent infections and exposures (travel, animals, drugs)
- Large, persistent, progressive (systemic) nodes with or without associated fever, weight loss, night sweats, fatigue, or bone pain are more suggestive of malignancy

- Pallor, bruising, jaundice, tachycardia, tachypnea, swelling or fever warrants additional laboratory and radiological studies
- Supraclavicular nodal involvement suggests malignancy
- Cervical posterior triangular, mediastinal or abdominal lymphadenopathy is almost always pathologic
- Generalized nodal involvement (involving at least two noncontiguous nodal areas) with or without hepatosplenomegaly; or lymphadenopathy that persists or progresses in a non-cervical area is suggestive of malignancy

MANAGEMENT:

- Localized lymphadenopathy – local culture (i.e. throat culture), and/or lymph node aspiration, complete blood count, ESR, blood cultures, monospot, skin testing (PPD), toxoplasmosis serology and other specific viral and fungal

- blood testing as indicated by the history and physical
- Systemic lymphadenopathy – a complete blood count, ESR, LDH, ferritin, blood cultures, monospot, skin testing (PPD), viral and fungal serologies, and additionally a chest X-ray and lymph node biopsy of the largest node may also be necessary
- Bone marrow biopsy/aspiration, CT scans, PET scans, Gallium scans will depend upon lymph node biopsy results
- Most enlarged nodes usually resolve in a few weeks, during which time the nodes should be monitored
- Lymphadenopathy due to a bacterial process requires antibiotic intervention
- Lymph nodes should be biopsied when malignancy is suspected, or when progressive or persistent lymphadenopathy is noted



Spotlight on Treatment

Recurrent Rhabdomyosarcoma & Ewing's

Phase II protocols using DX-8951f (Exatecan) for the treatment of rhabdomyosarcoma, Ewing's sarcoma or desmoplastic small round cell tumor are currently open here. DX-8951f is an inhibitor of topoisomerase I. More potent than either topotecan or irinotecan, phase I trials had responses in patients who previously received other topoisomerase I inhibitors. The diarrhea often seen with irinotecan has not been a problem with DX-8951f. The drug is given IV over 30 minutes daily for five days in 21-day cycles.

For more information, contact Dr. Cynthia Herzog 713-792-5055.



Drs. Seth Corey and Keith Hoots are currently studying the biology and therapy of children and adolescents with high platelet counts (600,000/ul), and we would be interested in discussing this further (713-792-9511).

New Staff Member

Joshua Samuels, MD, MPH joins the Division of Pediatrics as a Pediatric Nephrologist.

A native of Houston, he received his undergraduate training at Wesleyan University before medical training at Baylor College of Medicine. Dr. Samuels completed a combined residency in Internal Medicine and Pediatrics at the University of Rochester in N.Y. in 1999. He is currently board certified in both General Pediatrics and Internal Medicine. Dr. Samuels has recently completed fellowship training in both pediatric and adult nephrology at the University of Texas Health Science Center in Houston. His clinical and research interests include acute and chronic kidney disorders, acute hemodialysis, electrolyte abnormalities, acid-base disorders, hypertension, and other renal complications of cancer. Dr. Samuels is available for both inpatient and outpatient consultation. Outpatient visits can be scheduled through the Pediatric and Adolescent Center, and inpatient evaluations can be performed around the clock for urgent consultation.



Kim's Place is designed for M. D. Anderson to centralize and expand on the important services that the Division of Pediatrics offers through its Adolescent and Young Adult (AYA) program.

Located in The Park on the second floor of the Albert B. and Margaret M. Alkek Hospital, Kim's Place is unique in that it serves adolescents and young adults who are patients or who have family members who have cancer. In one location, it offers social, educational, vocational and recreational services.

Through its AYA program, Kim's Place offers a home theatre/study area for holding counseling sessions, class discussions and general meetings. It includes a large-screen television with surround sound. A 12-seat theatre room, with an Internet-accessible PC system, serves as a group activity area for lunchtime discussions and support group meetings.

Visitors can unwind with a variety of entertainment features including individual music listening consoles, a Wurlitzer jukebox, pool tables, video games and a computer area equipped with the latest in multimedia technology.

In addition to honoring Kim Perrot with memorabilia highlighting her basketball career and the Houston Comets organization, the entry area offers a relaxed environment

equipped with a television and eating area, kitchen facilities, and a booth for craft activities.

M. D. Anderson has always been known for treating not just cancer, but the individual experiencing cancer. For adolescents and young adults, Kim's Place is the latest example of how the Division of Pediatrics at M. D. Anderson puts patients and families first.

Kim Perrot – At five feet five inches tall Kim Perrot was not big by basketball standards, but she had a major impact on the lives of those she met. A woman of exceptional character, she overcame personal adversity while focusing on the needs of others who faced equally difficult challenges. As the starting point guard for the Houston Comets' 1997 and 1998 WNBA championship teams, Perrot committed herself to encouraging and motivating young people to succeed.

Perrot accepted her final challenge just as she had all the others – with unshakable faith and a relentless defense. Only this challenge differed from her other opponents. Perrot, a non-smoker, was diagnosed with lung cancer that had spread to her brain. Although devastated, she was determined to fight this battle to the end.

"My life has a plan, and this is just another chapter," she said. "It all revolves around the same thing – struggles I've had and how throughout those struggles I've always won the battle. This is another battle. It's just a bigger battle. I will still tell my story." Because of Perrot's commitment to youth and the courageous battle she



waged against cancer, the Houston Comets chose to honor her by creating a facility where adolescent cancer patients can go to play, learn and visit with each other and their families.

While she lost her battle with cancer on August 19, 1999 at age 32, Perrot's dedication and memory live on in Kim's Place.

DIVISION OF PEDIATRICS

Academic Office: 713-792-6620

Division Head
Eugenie Kleinerman, MD

Deputy Division Head
Robert Wells, MD

Adolescent/Young Adult
Michael Rytting, MD
Martha Askins, PhD

Bone Marrow Transplantation
Ka Wah Chan, MD
Laura Worth, MD, PhD
Demetrios Petropoulos, MD

Brain/Neural Tumors
Joann Ater, MD
Asadullah Khan, MD

Endocrinology
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W. Keith Hoots, MD

Late Effects
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Leukemia/Lymphoma
Seth Corey, MD, MPH
Joya Chandra, PhD
Steven Culbert, MD
Renee Madden, MD, MS
Irma Ramirez, MD
Michael Rytting, MD
Robert Wells, MD

Nephrology
Joshua Samuels, MD, MPH

Neurology/Neurofibromatosis
Bartlett Moore, PhD
John Slopis, MD, MPH

Non-Neural Solid Tumors
Cynthia Herzog, MD
Norman Jaffe, MD
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R. Beverly Raney, MD

Critical Care
Alan Fields, MD
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Theresa Sunderland, MD

Pediatric Surgery
Richard Andrassy, MD
Martin Blakely, MD
Kevin Lally, MD
Charles Cox, MD

Neurosurgery
Raymond Sawaya, MD
Fred Lang, MD

Psychology
Martha Askins, PhD

New Patient Line: 713-792-5410
After Hours: 713-792-7090