

'Thinking Errors' Provide Chance for Reflection

BY BETSY BATES
Los Angeles Bureau

MONTEREY, CALIF. — Harvard Medical School hematologist Dr. Jerome Groopman has said that "people talk about technical errors in medicine, but no one talks about thinking errors."

This sentiment registered with Dr. Bari B. Cunningham, a pediatric dermatologist at the University of California, San Diego, and Rady Children's Hospital, prompting her to air her "missteps and misdiagnoses" with colleagues at the annual meeting of the California Society of Dermatology and Dermatologic Surgery.

"The only real mistake is the one from which we learn nothing," she said, quoting self-help author John Powell.

In looking back at her own errors, Dr. Cunningham saw evidence of the four types of errors cited by Dr. Groopman in his book, "Where Doctors Go Wrong":

► **"I Recognize the Type."** These are attribution errors based on stereotypes, she said, such as the Hodgkin's lymphoma that goes undiagnosed in an anxious, neurotic 50-year-old patient with pruritus.

► **"I Just Saw a Case Like This."** After four cases of viral exanthem, it may be tough to recognize the distinctions that mark a drug eruption. On the other hand, a rare diagnosis that leaves a "deep impression" may heighten consideration of that "zebra" in the next 10 patients with more typical conditions, she pointed out.

► **"I've Got to Do Something."** A physician may have a tendency to panic when faced with a rapidly spreading

condition, but "as dermatologists we have time" to consider the differential diagnosis before whipping out the prescription pad, said Dr. Cunningham. Look it up. Consult with a colleague, she advised.

► **"I Hate (or Love) This Patient."** It's fairly obvious that one's irritation with a given patient can lead to an oversight, but the reverse is also true: Physicians may be a reluctant to acknowledge signs or symptoms of a serious disease in patients to whom they have grown close.

Dr. Cunningham recalled that she was reassured with the rapid resolution of left-sided facial Sturge-Weber syndrome in a toddler following pulsed dye laser treatments and a check by an ophthalmologist. A few years later, she felt "incredibly responsible" when the child was diagnosed with advanced glaucoma, because she had not realized or informed the family that even low-risk patients with V1 (fifth cranial nerve, ophthalmic division) Sturge-Weber syndrome require annual ophthalmic examinations.

Referring to another case, she said she was lucky to have considered Kawasaki disease in an Asian American baby boy with a groin rash that she might have missed on a busy afternoon in a private practice. An insistent mother emphasized that the rash began with a fever.

"There was a fellow there, and I was trying to do the right thing and said, 'You always want to have Kawasaki

disease in your differential.' Lo and behold, this child was sent for an echocardiogram and had a dilated coronary artery," Dr. Cunningham said. Manifestations of this potentially fatal disease may be subtle and incomplete in infants, but in this case the fever was a critical factor leading to further evaluation according to a published algorithm (Pediatrics 2004;114:1708-33).

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by the parents of an 8-month-old; they had been told that the fast-growing lesion on his posterior thigh was a hemangioma. "The father was a physician and they didn't buy it," she commented. Her own doubts were somewhat assuaged when a surgical biopsy performed in the operating room was read by a pathologist as a hemangioma.

Still, the rapid growth, the fact that the lesion did not appear until the child was 4 months of age, and the bloodless surgery made her continue to doubt the diagnosis.

MRI revealed the lesion was a virtually avascular "very well-circumscribed, nonenhancing mass" that eventually proved to be a lipoblastoma containing primitive adipocytes, she said. Although benign, such lesions continue to grow and do not resolve on their own, and may recur. ■



Iatrogenic Events Reported in 30% of Hospitalized Neonates

BY TIMOTHY F. KIRN
Sacramento Bureau

Iatrogenic events occur quite frequently in the care of high-risk neonates, according to a study from France that found 116 of 388 patients admitted to a neonatal unit experienced an event.

Twenty-nine percent of the 267 events were considered severe, and 34% were judged to have been preventable.

An event was defined as something that potentially compromised a patient's safety. A severe event was defined as any event that resulted in disability, death, or an extended hospital stay.

"Our study has shown that a substantial proportion of neonates admitted to hospital had iatrogenic events, a significant proportion of which were preventable," wrote Dr. Isabelle Ligi of the division of neonatology of La Conception Hospital in Marseille, and her colleagues (Lancet 2008;371:404-10).

The study showed an incidence rate of 26 events per 1,000 patient days. Fifty-six of the 116 patients who experienced an event experienced more than one. Two patients died following an iatrogenic event, although in neither case was that event considered preventable.

The study was a test of an anonymous, iatrogenic-event reporting system designed by the hospital's neonatology division, and it considered the events reported among all admissions between Jan. 1, 2005, and Sept. 1, 2005.

The study findings suggest that iatrogenic events in hospitalized neonates

may be less often preventable than those that occur to adults and older children, Dr. Ligi and her associates said. It is estimated that 40%-60% of iatrogenic adverse events in adults and children are preventable. In this study, only 34% were judged preventable, and only 21 of 78 events (27%) that were considered severe were judged preventable.

The investigators also reported that the major risk factors for an event included low gestational age and low birth weight, use of a central line, and mechanical ventilation.

Cutaneous injuries and nosocomial infections were the most common events recorded; nosocomial infections and respiratory iatrogenic events were the most severe, Dr. Ligi and her associates said.

Out of a total of 267 events recorded, 94 (35%) were cutaneous events and 62 (23%) were nosocomial infections. Forty-nine (79%) of the nosocomial infections were considered severe and nine of the 26 (35%) respiratory events were considered severe. Drug-related (34) events were common, but usually minor.

In a commentary published with the study, Dr. Gitte Larsen and Dr. Howard Parker said the study shows how efforts to reduce medical errors and other iatrogenic events need to be implemented locally (Lancet 2008;371:364-5).

Individual hospitals need to know what their specific errors are, and strategies developed nationally to reduce errors are likely to be inadequate, said Dr. Larsen and Dr. Parker of Primary Children's Medical Center, Salt Lake City, Utah. ■

Restricting Diet for Prevention Of Atopy Has Limited Worth

BY BRUCE K. DIXON
Chicago Bureau

The documented benefits of nutritional intervention that might prevent or delay the onset of atopic disease are largely limited to infants at high risk of developing allergy because a parent or sibling has allergic disease, according to a revised policy statement of the American Academy of Pediatrics.

"Current evidence does not support a major role for maternal dietary restrictions during pregnancy or lactation," according to the new report. Therefore, physicians advising women on nutritional options related to allergies during pregnancy, lactation, and the first year of life can be less restrictive than they have been up to now.

"[Physicians] need to reconsider the entire issue of how they feed babies with the intention of preventing allergies," said Dr. Frank R. Greer, chairman of the American Academy of Pediatrics (AAP) Committee on Nutrition, which developed the statement in cooperation with the academy's Section on Allergy and Immunology.

The new document replaces a 2000 policy statement from the AAP that addressed the use of hypoallergenic infant formulas and included provisional recommendations for dietary management for the prevention of atopic disease (Pediatrics 2008;121:183-91).

"The idea that egg, fish, and foods containing peanut protein should not be introduced before 1 year of age is not based on good science," Dr. Greer said in an interview. "I suppose that if I had a baby with

severe eczema, I would not recommend those foods, but the problem is these restrictions have been applied to all babies."

There is evidence that breast-feeding for at least 4 months, compared with feeding formula made with intact cow milk protein, prevents or delays the occurrence of atopic dermatitis, cow milk allergy, and wheezing in early childhood.

In studies of infants at high risk of atopy who are not exclusively breast-fed for 4-6 months or are formula fed, there is modest evidence that the onset of atopic dermatitis might be delayed or prevented in early childhood by the use of extensively or partially hydrolyzed formulas, compared with cow milk formula, they said. However, not all hydrolyzed formula might have the same effect, and more research is needed to determine if the benefits extend to later childhood and adolescence.

Dr. Greer and his colleagues also concluded that there is scant evidence that delaying the introduction of complementary foods beyond 4-6 months of age prevents atopic disease.

Other statements summarizing the current evidence included the following:

► Maternal dietary restrictions during pregnancy do not appear to play a significant role in the prevention of atopic disease in infants.

► There is no convincing evidence for the use of soy-based infant formula for the purpose of allergy prevention.

► For infants beyond 4-6 months of age, there is insufficient data to support a protective effect of any dietary intervention for the development of atopic disease. ■