

SUBSPECIALIST CONSULT

Management of Dental Emergencies

As general pediatricians, you should feel confident in your ability to diagnose and manage dental trauma and emergencies. Bumped teeth that are not loose, bruised gums, and aphthous ulcers are dental emergencies that you can evaluate and treat in your office, for example.

In contrast, referral is warranted after trauma loosens a tooth, breaks it, or causes the tooth to come out (avulsion). In addition, a child who presents with extreme pain, an abscessed tooth, or a tooth pushed out of position should be referred to a specialist. Dental cellulitis and severe soft tissue injuries of the mouth are other reasons I typically see these children.

An avulsed permanent tooth should be replaced quickly, within seconds or minutes. The longer the tooth is out of the mouth, the poorer the prognosis. Do not handle the root surface, but do rinse lightly and quickly to remove foreign material. If it is impossible to reimplant the tooth immediately, instruct parents to store the tooth in milk or saline for transport to the dentist.

Once the child reaches a specialist, treatment may include reimplantation with a splint to stabilize the tooth, prescriptions for systemic antibiotics and oral antimicrobials, and pulp therapy. Inform parents that most displaced per-

manent teeth undergo pulpal necrosis and require initiation of root canal therapy 1 week after stabilization.

In contrast, primary teeth usually are not reimplanted. If a patient comes in with a “baby tooth” that has been knocked out, then just pass it on to the tooth fairy.

The good news is most tooth injuries are self-evident. Signs of trauma include discoloration and patient reports of pain associated with tooth movement, chewing, palpation, and/or sensitivity to hot or cold food or drinks.

If you see facial swelling, however, expand your differential diagnosis to include etiologies beyond the teeth or gingival tissue. Infections and allergic reactions, for example, also can cause substantial gingival swelling. Rule out ear infections, swollen lymph nodes, and strep throat and viral infections, because these can mimic dental concerns.

If a child presents after trauma with a fractured tooth, make sure to remove any tooth fragments before suturing nearby tissue, including lacerated lips. Hemorrhage control, cleansing, and suturing, as indicated, are important management tips for such soft tissue wounds. Antibiotics are recommended for all “through and through” lacerations.

Establish a working relationship with pediatric dentists and oral surgeons in

your community. When a child requires immediate care, these specialists can provide telephone advice on how to handle the emergency and/or be a source of immediate referral for the patient.

A dentist never wants to see a child for the first time during a traumatic situation. Instead, each patient should see a dentist by age 1 to establish a dental home. A child who visits the dentist on a regular basis will become familiar with the provider and more comfortable in the event of a dental emergency. Education of parents on optimal oral health, prevention of problems, and appropriate dental development are other benefits of early, routine dental care.

I recommend the American Academy of Pediatrics Section on Pediatric Dentistry and Oral Health’s new curriculum called Protecting All Children’s Teeth (PACT): A Pediatric Oral Health Training Program (www.aap.org/oralhealth/pact.cfm). If you suspect dental trauma is caused by physical abuse, the AAP also



TONYA FUQUA,
D.D.S.



Some dental emergencies can be evaluated and treated in your office, according to Tonya Fuqua, D.D.S.

provides resources to help you recognize the oral and facial signs of such abuse (Pediatrics 2005;116:1565-8).

DR. FUQUA is manager of the Save a Smile program under Community Health Outreach at Cook Children’s Hospital in Fort Worth, Tex. Dr. Fuqua said she had no relevant financial disclosures. E-mail her at pdnews@elsevier.com.

‘Baby Steps’ Is Best for Preventing Isotretinoin-Induced Acne

BY BRUCE JANCIN

FROM THE ANNUAL HAWAII DERMATOLOGY SEMINAR

WAIKOLOA, HAWAII – Isotretinoin-induced acne fulminans is an uncommon but devastating complication that can be avoided by taking a go-slow dosing approach in patients with truncal acne, said Dr. Guy F. Webster.

“If patients have significant acne on their back or chest, 40 mg/day of isotretinoin is not the dose to start with. You start with 20 mg. I tend to keep them on prednisone at 20 mg/day as well. At the end of the first month, I’ll sneak up the isotretinoin and taper away the prednisone. I’ve gotten patients who’ve had prior episodes of acne fulminans clear with that technique,” Dr. Webster said at the seminar sponsored by Skin Disease Education Foundation.

Alternatively, a superpotent topical corticosteroid such as clobetasol can be applied at the first sign of incipient acne ful-

minans – namely, a paradoxical sharp worsening of acne a week or two after starting isotretinoin. “I like the idea of preventing the problem with oral steroid rather than waiting for it to start before treating it topically, but this approach works great as well,” commented Dr. Webster of Jefferson Medical College, Philadelphia.

Failure to promptly recognize isotretinoin-induced acne fulminans can lead to catastrophe, said Dr. Webster. He has seen patients whose physician started them on 40 mg/day of the retinoid, then doubled the dose when the acne worsened. The result was extensive areas of granulation tissue, gigantic keloids, and scarring.

“It’s a terrible outcome for someone to go from one or two nodules on the chest to being badly scarred,” he said.

According to Dr. Webster, 80% of patients treated with a

total isotretinoin dose of more than 130 mg/kg are essentially cured of acne for life. Of those 20% who are inadequate responders, a second course cures 80%. Similarly, 80% of nonresponders to two courses of the oral retinoid will be cured by a third. And so on, he said.

‘You start with 20 [not 40] mg/day. I tend to keep them on prednisone at 20 mg/day as well. At the end of the first month, I’ll sneak up the isotretinoin and taper away the prednisone.’

Dr. Webster said he believes the biggest cause of isotretinoin treatment failure is underdosing in an effort to minimize side effects. The No. 2 cause is diet.

“If you have a patient who’s not taking their isotretinoin with a somewhat fatty meal, they’re getting less than half the dose you think they’re getting,” he said.

He said he minimizes the risk of dietary interference by hav-

ing patients take isotretinoin as a single daily dose, rather than twice daily as recommended in the package insert.

“The pharmacokinetics indicates this can easily be a [once-daily] drug,” he said. “Just make sure to take it with food that has some fat. If breakfast is a Diet Coke and a piece of toast, that’s no good. It’s got to be a Diet Coke and a piece of toast with a big slop of cream cheese. Otherwise, take it with dinner. It makes a big difference.”

A novel formulation of isotretinoin in phase III clinical trials could do away with diet-related absorption issues. This formulation of the retinoid (CIP-isotretinoin) is absorbed the same whether taken with food or fasting. The drug, being developed by Cipher Pharmaceuticals Inc., is probably a couple of years away from the market, Dr. Webster said.

Common isotretinoin side effects – dry skin, dry lips, and

high triglyceride levels – are dose dependent and manageable by lowering the dose. Another side effect, hypertriglyceridemia, responds to fish oil or the fibrate drug gemfibrozil (Lopid).

Elevated liver function test results are an uncommon complication most often due to elevated creatine kinase rather than liver-specific enzymes. In Dr. Webster’s experience, this problem occurs chiefly in athletes engaged in hard training or in-season competition.

“I typically won’t give somebody isotretinoin when they’re doing strenuous physical exercise. For kids who play sports year-round, I have them pick the sport that matters least to them and have them back off the exercise and go slow with the isotretinoin to keep the muscle aches and [creatinase] levels down,” he said.

Dr. Webster said that he has served as a consultant to Cipher. SDEF and this news organization are owned by Elsevier.