Managing Summer Lacerations in Children

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The hard play of hot summer days means those of us in the urgent care business will be seeing more children with cuts and bruises. This installment of Pediatric Urgent Care will reveal family- and child-focused ways to handle minor procedures.

Given the season, we will focus specifically on laceration repair. Many of the concepts I discuss, however, also apply to other procedures, such as blood draws, IV placement, and burn debridement.

If a cut is severe enough to require an urgent care visit, both the child and family can be quite upset. Typically, family anxiety is higher and staff anxiety begins if the child is under the age of 5. Because the family's *initial* impression of staff sets the stage for their impression of the entire experience, it is essential that the individuals on your frontline are sympathetic, attentive to pain issues, and able to address the family's concerns with compassion as the visit gets under way.

Using LET gel—lidocaine-epinephrine-tetracaine in gel form—may improve a family's laceration repair experience and help set your center apart from others. LET gel is prepared by a compounding pharmacy, and is available in most communities.

Apply LET gel to the laceration, insert a small amount of cotton into the laceration, and then soak the cotton with more LET gel. This helps absorption and results in more consistent anesthesia. After 30 minutes, test the area with a needle and inject additional lidocaine as needed.

I have found that approximately 80% of patients experience complete wound anesthesia after the initial 30 minutes. In the remaining 20%, LET gel often attenuates the pain of a subsequent lidocaine injection.

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Integrating Pharmacologic and Non-pharmacologic Techniques

The real power for creating a superb experience for children requiring laceration repair, however, comes from *integrating* pharmacologic and non-pharmacologic techniques. When you are almost ready to start the repair, spend just three to five minutes helping the child prepare. The child will struggle less, staff will be less anxious, and the family will leave your center more satisfied as a result.

Start while you are deciding which pharmacologic agents to use. Engage the child in conversation; connect about a vacation, TV show, school, or anything else developmentally appropriate. Bringing the parent into the conversation helps to establish trust.

Next, consider possible positions, which depend on the age of the child and the specific procedure. A great position for laceration repair in a toddler—a common and sometimes challenging procedure in the urgent care setting—is in a parent's lap. Lap position isn't appropriate for all situations, but the technique works especially well for scalp and extremity lacerations.

With position established, next communicate with the

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Mexico but is available only on an investigational basis in the U.S.

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Prevention of Rheumatic Fever

Key point: The American Heart Association has updated its scientific statement; as before, emphasis is on treatment and prevention of streptococcal pharyngitis.

Citation: Gerber MA, Baltimore RS, Eaton CB, et al. Prevention of rheumatic fever and diagnosis and treatment of acute streptococcal pharyngitis: *Circulation*. 2009;119:1541-1551.

This document focuses on timely diagnosis and treatment of streptococcal pharyngitis (primary prevention) and on prevention of streptococcal pharyngitis in individuals with a previous diagnosis of RF (secondary prevention).

Primary prevention requires accurate detection and proper antibiotic treatment of patients with streptococcal pharyngitis, without unnecessary treatment of those who have pharyngitis caused by other agents. Accurate detection entails using clinical judgment to evaluate signs and symptoms and confirming the diagnosis with a throat culture, a rapid antigen-detection test (RADT), or both.

This document recommends screening with RADTs and treating all patients who test positive with appropriate antibiotics. For adults who are RADT-negative, antibiotics should be withheld; for children who are RADT-negative, throat culture should be performed for confirmation, because some RADTs are more sensitive than others.

For treatment of streptococcal pharyngitis, the document recommends oral penicillin V two or three times daily for 10 days, amoxicillin once daily for 10 days, or intramuscular benzathine penicillin as a single dose. For penicillin-allergic patients, narrow-spectrum oral cephalosporins, clindamycin, or clarithromycin for 10 days—or azithromycin for five days—is suggested.

For patients with a previous diagnosis of RF, the recommended duration of prophylaxis has been unclear because guidelines from different organizations have disagreed on some of the details.

This document recommends prophylaxis for:

- 10 years or until age 40 (whichever is longer) for those with carditis and residual heart disease
- 10 years or until age 21 (whichever is longer) for those with carditis but no residual heart disease
- 5 years or until age 21 (whichever is longer) for those without carditis.

The text provides further recommendations for individualizing prophylaxis duration and suggests the possibility of lifelong prophylaxis for patients who are especially vulnerable.

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child about what will happen. This can range from challenging to impossible with a very young child, but you can often engage a child of 2 or 3 in some conversation and play. Let the child know what to do rather than what *not* to do. For example, say "Try to hold yourself real still" rather than saying "Don't move."

Show the child the materials you will be using. Refer to the suture material as "string Band-Aids." Let the child feel water from the irrigation syringe so she knows what to expect. Always explain that, while it should not hurt during the repair, she *will* feel some pulling and tugging, and then demonstrate that the pulling doesn't hurt. This way, the child will not be surprised at that sensation.

Finally, once the child is prepared, consider various distraction techniques to use during the laceration repair. Many books fit the bill: "I Spy" books are excellent for distracting toddlers and young school-aged children during the procedure. Or, use an inexpensive, portable CD player with music appropriate to the child's age. The child can squeeze a rubber ball, or blow bubbles during the repair. Engaging the parent in helping to distract the child is a great way to keep both the child and family less anxious as you perform the procedure.

Integrating these techniques in the following order, in my experience, ensures the most effective result in easing pain and maximizing satisfaction:

1. Decide on pharmacologic agents (in this case, LET gel and lidocaine).
2. Establish trust with the child.
3. Consider alternative positioning techniques.
4. Prepare the child using appropriate language and demonstrations.
5. Distract the child during the procedure.

By combining these pharmacologic and non-pharmacologic techniques, you will create an experience that is vastly superior to what the family might have anticipated when they arrived at your center. And this positive experience during a time of anxiety will go a long way in establishing your center as "the" place for families seeking pediatric urgent care. ■