

When to Treat, When to Go to the ER, and When to Call the Plastic Surgeon

An exclusive interview with Dr. Jeremy White

It's Friday afternoon and your precious 3-year-old daughter just tripped and fell outside by the pool. You hear the crash and she comes crying to you. There is blood everywhere and now, on top of the stress of Shabbos preparations, you now have a potential emergency on your hands. So what do you do? We had the opportunity to sit down with Dr. Jeremy White to discuss everything stitches!



WHAT ARE YOUR RECOMMENDATIONS FOR THE FIRST STEP?

Apply pressure and a cold pack to try to slow the bleeding. Once the bleeding slows down, you can get a better sense of how extensive and deep the wound is. It can be helpful to take a photo at this point, if possible, to help in communicating with other doctors before they remove a bandage.

Different areas bleed more, which ones bleed the most? The scalp and areas near the bone around the eye tend to bleed the most and can be scary. Even a small cut can look like a bloody mess and run down the face, making you think that the injury is more extensive than the reality.

WHAT IS THE MOST COMMON PLACE FOR SUTURES?

60-80% of pediatric lacerations occur in the head and neck with the most common areas being in the forehead and chin. Most people with a fun childhood growing up have some kind of scar on the chin to show for it.

WHAT WILL DETERMINE IF SUTURES ARE NECESSARY?

If bleeding does not stop with pressure and ice, the area may need sutures to stop the bleeding. Do not attempt to put dermabond here. The wound will continue to bleed and the glue will just fall off. Other reasons for sutures would be a laceration that has a gap to it, especially if it is in on the face or neck

where we are more aesthetically conscious. Some full thickness wounds around joints, such as on the fingers, may look well approximated at baseline but a gap develops when the joint is bent. These wounds also may need to be sutured and examined to make sure that there is no tendon injury underneath.

IF IT IS DETERMINED THAT SUTURES ARE NEEDED, HOW SOON AFTER THE INJURY SHOULD THE SUTURING TAKE PLACE?

Ideally, a wound should be closed within six hours of the injury. You may have more wiggle room with face wounds, due to their excellent blood supply, and that can be left to the discretion of your surgeon.

ARE THERE ANY AREAS THAT DO BETTER WITH STAPLES OR SURGICAL GLUE?

Staples and glue both have the advantage of being very quick and easy to apply. Staples are great for the scalp, especially since we are less concerned about the marks that they might make in that area and they are more gentle on the hair follicles in comparison to a continuous running suture loop. They might leave a scar that is fractions of a millimeter

wider, but this is generally well tolerated in the scalp. I'm not a huge fan of using surgical glue on its own unless it is an area that does not have a lot of motion to it. If it is a superficial laceration to the brow that is not in the hair, I might consider using glue, but usually not around the lip of a finger joint. Sometimes I will add surgical glue as an extra sealant protective layer to a wound if I have closed with sutures that are all buried and dissolvable under the skin.

WE KNOW CHILDREN CAN MOVE AROUND... HOW DO WE KEEP THE CHILD STILL?

We can often employ a makeshift papoose by surrounding the child's arms and body and giving a big hug with a blanket while someone holds the head still. Most smaller children are able to tolerate this well despite their obvious fear of the unknown as long as the parent talks to them during the procedure. Some parents, however, know in advance that their child is very strong and will not sit still for any procedure. In that case, I would recommend a visit to the pediatric emergency room where sedation can be given with medicine in the nose or other methods. If the laceration involves significantly deeper structures, like eyelid muscles or hand tendons, they will likely need to be explored and repaired in the operating room under anesthesia.

ARE THERE ANY RISKS TO HAVING SUTURES PLACED?

There are risks and benefits to almost everything that we do in medicine and it is our job as physicians to help guide you through that decision process. Sutures carry the risk of infection, especially if the wound is dirty, has a foreign body, or has been open for a prolonged period of time. Railroad marks can be left by tight sutures in a swollen wound, but this tends to resolve if sutures are removed at an appropriate time and topical silicone gel is used. Buried sutures are a great way to obtain amazingly thin scars by relieving wound tension, but can sometimes extrude from the wound at a later date. Fortunately, this is a short term nuisance and resolves with minimal effort.

If the wound is not sutured and there is a gap to the skin, the major risk are that the area will bleed for a prolonged period of time, the wound will take longer to heal, and the scar will be wider than if it were sutured.

ARE THERE ANY RESTRICTIONS AFTER SUTURES?

I recommend limiting strenuous activity for the next 24 to 48 hours if possible. This will help to minimize bleeding and bruising. Avoid any activity that might cause trauma to the area and cause the wound to reopen. Keep the area dry for 24 to 48

hours, depending on the wound location, and avoid submersion in the bathtub, pool, or ocean for at least a week or more, depending on the wound healing process.

HOW LONG DO SUTURES NEED TO REMAIN IN PLACE TO ENSURE PROPER HEALING?

The reason that we want to remove the sutures in a timely manner is to minimize railroad track marks on the skin and the body's inflammatory response to something foreign. Sutures can often be removed at around 7 days for the face and neck or 10-14 days for the arms and torso, and 2 weeks for the legs. This timing also depends on how the wound appears to be healing and whether or not there are buried sutures that are relieving tension. Sometimes we do not have to remove sutures at all if we use fine dissolvable sutures, buried sutures, or surgical glue.

ONCE THE SUTURES ARE REMOVED, WHAT STEPS CAN ONE TAKE TO DECREASE THE RISK OF SCAR?

I usually recommend either a topical antibiotic ointment or Aquaphor for the first two weeks of healing. Once the wound is no longer raw appearing, one can start applying a silicone gel twice daily for at least 3 months and sunscreen with SPF 30 or greater. For topical scar treatments, medical grade silicone has the most evidence



behind its efficacy. It increases hydration of the skin, protects the scar tissue from bacteria, helps growth factors to balance collagen production, and helps to reduce itching. This product is available as a sheet, especially for areas that hide under clothing, but is more commonly used as a gel for the face. While sunscreen is generally a good idea to apply during everyday life in south Florida, it has the additional advantage of decreasing the risk of darkening of a scar while it is in its most inflammatory stages of a healing process. If you have any concerns about thickening of the scar, it is best to ask your doctor early if other treatment

options are necessary before it becomes a worse problem.

ANY FINAL THOUGHTS?

Raising children is already stressful enough and sometimes life throws unexpected curve balls our way. Once you have taken your initial management steps, you can be comforted by the fact that you are in a community surrounded by talented professionals who are ready to help you. Despite the hard work involved in repairing a wound, there is no magic to wound healing with sutures. Everyone will heal with a scar. How the scar heals, however, will depend on how extensive the laceration is, how the

tissues are treated and put back together without tension on the closure, avoidance of infection, timing to remove sutures, postoperative wound care, and personal scar related genetics. If you have concerns about your skin's healing process, you should consult with a board-certified dermatologist or plastic surgeon.

Thank you Dr. White for your time and expertise. Although injuries are never fun, having proper guidance definitely helps to get the job done!

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