

JUST HANGING AROUND: QUESTIONS AND ANSWERS ABOUT BODY SUSPENSIONS

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Suspension is a ritual, ordeal, form of body play, or rite in where a person hangs from flesh hooks put through (normally) temporary piercings.

—S. Larratt

It's Saturday night at 3 AM and a 24-year-old heavily pierced and tattooed man presents to triage with multiple lacerations on his arms and legs. In obtaining the initial history, it is found that he was undergoing a body suspension at a local club and "the hooks ripped out." He indicates that he was advised to "get some stitches" for the wounds. Your mind is trained to ask questions such as, "When was your last tetanus shot?" and you are mentally preparing yourself by considering what hidden injuries may be present. However, the question you are dying to ask is, "Why was he hanging by hooks in the first place?" What follows are some questions and answers that focus on the aspects of suspensions from the perspective of the body piercer and the health care professional.

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Are Body Suspensions a New Fad?

Suspensions, although certainly not commonplace, are nothing new. Body modifications, whether by tattooing or piercing, have been practiced by cultures across the world for thousands of years.¹⁻⁴ In the Hindu culture, suspensions have been an integral part of the Thaipusam and Chidi Mari festivals for hundreds and possibly thousands of years. For hundreds of years in North America, during Sun Dance ceremonies, members of several Native American tribes are pierced in the chest, fastened to a sacred tree, and then vow to pull against the piercings until the flesh breaks.¹⁻³ For many of us, our introduction to suspensions has been through selected brief scenes in movies such as *A Man Called Horse*, *Coma*, *The Cell*, or *Hellraiser*.

Along with multiple piercings, extensive tattooing or body art, and other forms of body modification, full or partial body suspension is becoming more widespread than one might imagine. A review of a popular suspension Web site (www.suspension.org) finds several groups that regularly perform body suspensions in the United States and abroad. Accordingly, emergency medical professionals need to be prepared for the very real possibility that they will encounter and treat those who engage in suspensions.

Why Would Someone Voluntarily "Hang" by Hooks?

Why would someone voluntarily hang by hooks? Why not? Participants have different reasons for seeking the experience of a piercing or hook suspension, and reasons can vary depending on whether it is a private or public suspension. Private suspensions are done for the experience or benefit of the person suspending. Public suspensions often take place at clubs, festivals, and concerts and may involve the media. Some persons seek an expansion of consciousness, or a way of exploring the unknown. Others view suspension as a rite of passage, with ritual or spiritual implications. In the Hindu Thaipusam and Chidi Mari festivals, participants practice suspension in an attempt to "gain a state of grace." Still others see suspension as an opportunity to experience an adrenaline rush or a physical "high." Many persons describe it as similar to a "runner's high" mixed with the rush of an extreme physical feat such as bungee jumping

or skydiving. And there are those who participate in suspensions as a form of performance art or just as a means to gain attention. It is important to note that “suspendees” do not believe it is self-mutilation or any form of punishment.⁵

How Long Do People Hang?

The simple answer to “How long do people hang?” is that they hang until they are ready to come down. This period can range anywhere from a few seconds to several hours. People are encouraged to come down when they are ready. People who have experienced suspensions say it is not a contest to see how long you can stay suspended, but a matter of what you get out of the experience.

Who Are These People?

Usually those who seek out a suspension experience are “younger” and already familiar with body art procedures. However, participants can range across the adult life span (and age, as we know, can certainly affect the body’s reaction to any sort of activity). As participation in this activity grows, it is increasingly likely that emergency medical professionals will encounter “these people.” Remember, “Beauty is in the eye of the beholder,” and the same idea applies to those unique but not necessarily deviant individuals who choose to suspend (Figure 1).

Does It Hurt?

Of course suspension hurts. However, for many persons, the initial piercing is the most painful part. Most commonly, sterile needles are used to pierce the skin and create a track through which the hooks are placed. Unlike historic suspensions, it is rare that the hooks are actually used for the piercing itself. With appropriate placement and gauge of hooks, the pain described during the suspension may be described as intense, yet brief, or the person may experience little to no pain. It is actually common for the suspendee to report signs of euphoria due to the body’s production of adrenaline and endorphins. The use of alcohol, mind-altering drugs, or painkillers before suspension is discouraged for most suspensions but may be a part of religious ceremonial suspensions.

On a simplistic level, physically the experience is a feeling of pulling, burning, and pain all jumbled up, but for most people, this physical aspect is “tuned out” very quickly. Although individual experiences differ greatly, ultimately the act of suspension can be a euphoric floating sensation. On one end of the spectrum you find people who enter a trance-like state, feeling no pain whatsoever, and on the other end are people who have extreme pain, nausea, and panic attacks.

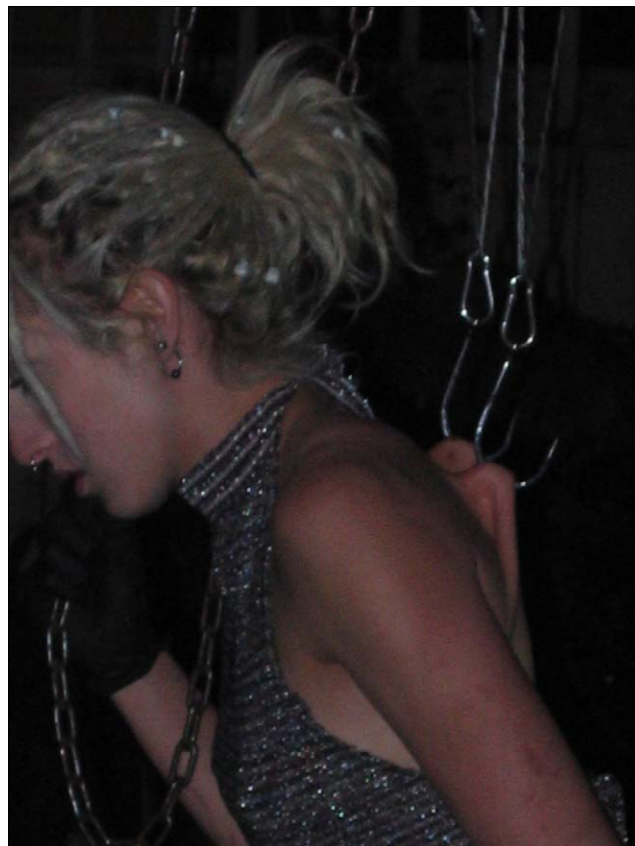


FIGURE 1

Young female undergoing a suspension. (Photo courtesy of MedPierce; www.MedPierce.com.)

In general, most people enter a shock-induced state of disorientation spiked with moments of pain and euphoria. In laymen’s terms, the act of suspension causes the body/mind to enter a state of shock while physically being positioned and restrained in a “floating” state.¹

Isn’t It Dangerous?

After the piercings and the placement of the hooks, the suspendee might show signs of lightheadedness. For the most part, the person rarely shows real signs of psychogenic shock until he or she is lifted by the hooks to get off the ground. A mental conflict often occurs as one attempts to remain in contact with the ground but knows that it is important to relax and allow the body to experience the suspension. The placing of the hooks and the initial lift are the points at which many people report some physical symptoms and may begin to feel faint, dizzy, or nauseated. Normally, the suspendee will pass through the most dangerous areas of suspensions within 5 to 10 minutes of hanging. Participants

suggest that there is a “science” to how to handle this, and that part of the “high” is to flirt with “shock.” However, loss of consciousness and/or vomiting while hanging is *extremely* dangerous.

What Do They Do While Suspended?

Once elevated, some individuals simply “hang around,” while others find suspensions comfortable and will swing about or otherwise play during the suspension.

Why Don't the Hooks Just Rip Out of The Skin?

The answer to why the hooks don't just rip out of the skin lies in the physics of pressure or weight distributed over a number of points or an area, not unlike lying on a bed of nails. In addition, the material properties of skin, such as the tough fascial layer below the dermis and epidermis, allow for it to bear great weights. Consider a comparison with suturing: the location of sutures placed, both through depth and distribution, allows for different grades of tension to be applied. In areas under pressure, such as a laceration over a joint, a very thin or superficial suture might tear the skin with the pressure of moving the joint. However, numerous stitches that grab the subdermal fascia will equalize the tension along the area under pressure. In general, the thicker the skin being sutured, the deeper the “bite,” and thus larger the needle required to reach fascia. In return, thick skin is extremely strong and can support high levels of tension. Thus, the number and gauge of the hooks required to suspend a body is dependent on the weight being supported by each hook, the depth of the insertion, the thickness of the dermis where the hook(s) are placed, and, of course, how many hooks are desired. Eight-gram and even larger hooks may be used in the back (where the dermis is thick and may support more than 220 lb [100 kg] and in situations where a minimum number of hooks is desired). Ideally, the hooks are placed where the body's weight is evenly distributed to avoid unequal pressure points and possible tearing. One just has to witness a suspension to learn a whole new respect for the strength of the human skin (Figure 2).

How Many Hooks are Normally Used With Each Style of Suspension?

Vertical suspensions usually are done with 2 to 6 hooks (with extra hooks for the arms in the case of a crucifix suspension), and horizontal suspensions generally are done with 8 to 12 hooks but can be done with many more (Table 1). The number of hooks used per suspension depends on 2 factors: (1) the experience level and (2) the weight of



FIGURE 2
Suspension hooks. (Photo courtesy of Allen Falkner; www.obscurephoto.com.)

the person undergoing the suspension. A good rule of thumb is as follows:

- 15 to 20 lb (7-9 kg) per hook for beginners (ie, 8 hooks for a 140-lb [64-kg] person)
- 20 to 40 pounds (9-18 kg) per hook for intermediate (ie, 4 hooks for a 140-lb [64 kg] person)
- 40 to 80 pounds (18-37 kg) per hook for advanced (ie, 2 hooks for a 140-lb [64 kg] person)
- Only highly experienced individuals should attempt 80+ lb (37 kg) per hook¹

Note: Beginners, intermediate, and advanced refer to a person's exposure to body modification and pain management. For example, someone with one tiny tattoo or piercing during their first suspension would be a beginner, whereas someone with large tattoos, various piercings, and several past suspensions might be considered advanced (Table 1).

TABLE 1

Common suspensions

Type of suspension	Description
Suicide suspension	Hung vertically with hooks in upper back; resembles a suicide by hanging
Scarecrow or crucifixion	Hooks placed in upper back and arms to resemble a scarecrow or crucifixion
Vertical chest suspension (sometimes called O-Kee-Pa style)	Hooks placed in anterior chest
Horizontal face down, also known as “Superman” suspension	Horizontal suspension with person facing down to resemble “flying”
Horizontal face up, also known as “Coma” suspension	Horizontal suspension with person facing up as in the movie “Coma”
Lotus suspension	Lotus or sitting position suspension
Resurrection suspension	Hooks placed in the abdomen and sometimes chest; similar to the horizontal face up suspension, although the legs, hips, and arms hang below the body
Knee suspension, also known as “Falkner”	Suspension from knees with person hanging upside down
Tandem or stacked	Suspension with one or more people suspending from each other
Pulls	The act of pulling away from another person or stationary object
Mobiles and spinning beams	Suspensions where 2 or more people are hanging from beams that counterbalance each other (Figures 5-9)

How Are the Hooks Placed?

How the hooks are placed is an extremely important question from a medical perspective. Knowing how the hooks are placed will better prepare us for treating the individual, should treatment become necessary. Generally speaking, the process starts with experienced, professional piercers who prepare the skin with PCMX-based surgical scrubs (eg, Technicare) or Betadine, like we use in the operating room. Examination gloves and masks typically are worn at this stage. After the area is prepared, the piercer will don sterile gloves before placing the needles and then the sterilized deep-sea fishing hooks (with the barb removed). Every effort is made to make the insertion in one motion and to maintain as close to sterile technique as possible, but standards may vary widely based upon local practices (Figure 3).

Is It Important to “Hang” Relatively Soon After the Hooks are Placed?

In most cases, the actual suspension begins as soon after hook placement as possible. This is especially true for persons undergoing a first-time suspension and allows for the initial endorphin rush that accompanies the placing of the hooks to aid in the pain associated with pulling or hanging. However, it is not mandatory to suspend immediately after hook placement. An experienced individual could suspend multiple times during the day from the same piercings and may go hours between suspensions.

What About Air Getting Under the Skin from the Stretching?

Air getting under the skin can and certainly does happen. Air trapped in the subcutaneous tissue (sometimes likened to Rice Krispies) may be described as the “post-suspension treat.” Unlike a pneumothorax, this situation, though uncomfortable, is not life-threatening, but would be considered a fairly common complication seen after suspension.⁶ After the suspension is completed and the hooks are removed, the wounds commonly are “burped” to aid in the removal of air and minimize subsequent pain and swelling.

What If the Hooks Rip Out?

Typically, the only reason people who undergo suspensions would seek medical care (related to the actual suspension) is in the event of hook(s) ripping out. It is important to confirm when, where, and how the hooks were placed. Under normal circumstances, this is about as clean as a wound as we are going to see in EMS or the emergency department itself. Depending on the time elapsed from the injury, primary or delayed primary closure of the wounds can be performed after appropriate wound irrigation with normal saline solution. While there is a direct relationship between the time of injury, wound closure, and subsequent infections, the length of this “golden period” of time is highly variable. In general, wound decontamination is far more important than antibiotics.⁷ However, if ripping was intentional, the individual may opt not to seek treatment, instead choosing to bear the scar as a reminder of the experience (Figure 4).



FIGURE 3
Placing of suspension hooks. (Photo courtesy of MedPierce; www.MedPierce.com.)



FIGURE 4
Intentional ripping with suspension. (Photo courtesy of MedPierce; www.MedPierce.com.)

Beyond Ripping, What Other Situations Might Bring the Person into the EMS System or to the Emergency Department?

A number of reasons for seeking medical attention exist, all of which are rare to very rare. They include:

- **Death.** To date, no deaths have been reported in the medical literature as a complication of or as a result of this type of activity.
- **Excessive bleeding.** Surprisingly, little bleeding usually occurs during the piercing or the actual suspension. The piercing needles usually are the same gauge or slightly smaller than the hooks used for the suspension. A smaller



FIGURE 5
Suicide suspension. (Photo courtesy of Allen Falkner; www.obscurephoto.com.)

gauge needle and a larger gauge hook will help prevent bleeding during the procedure. The majority of the bleeding will occur upon the removal of the hooks. In either case, before or after hook removal, simple direct pressure will stop the majority of bleeding from the puncture sites, and the wounds typically heal within 3 to 6 weeks.

- **Bruising.** One may certainly encounter bruising around the piercing sites, and occasionally a hematoma may result.
- **Fainting.** Lightheadedness or fainting as a result of the initial piercings is similar to that of someone giving blood or getting a shot. Fainting is most commonly vasovagal in origin and induced by pain, the sight of a needle, or the sight of blood. Typically, the individual will show signs of recovery within a few seconds and be fully conscious within a few minutes. Some persons choose to quit, whereas others choose to continue and try the suspension again. Should any loss of consciousness last more than a few moments or if there is any ongoing alteration



FIGURE 6
Face down “Superman” suspension. (Photo courtesy of Allen Falkner; www.obscurephoto.com.)



FIGURE 7
Face up “Coma” suspension. (Photo courtesy of Allen Falkner; www.obscurephoto.com.)

of consciousness, immediate medical attention should be sought and other reasons for syncope investigated.^{8,9}

- **Fall injuries.** Even a short fall may result in injury to the head, neck, or extremities, and appropriate trauma care should be rendered.¹⁰ Situations causing the person to crash to the floor are much more likely to be the result of a failure of the hoist, the chain or rope, or other equipment than from the hooks ripping out of the skin. Working with an experienced suspension practitioner makes any sort of rigging failure very uncommon.
- **Other medical complications.** Other problems may arise, especially if the individual fails to mention pre-existing medical conditions such as a latex allergy, heart conditions, epilepsy, or diabetes. Persons with prior medical conditions should seek the advice of their physician or nurse practitioner before attempting a sus-

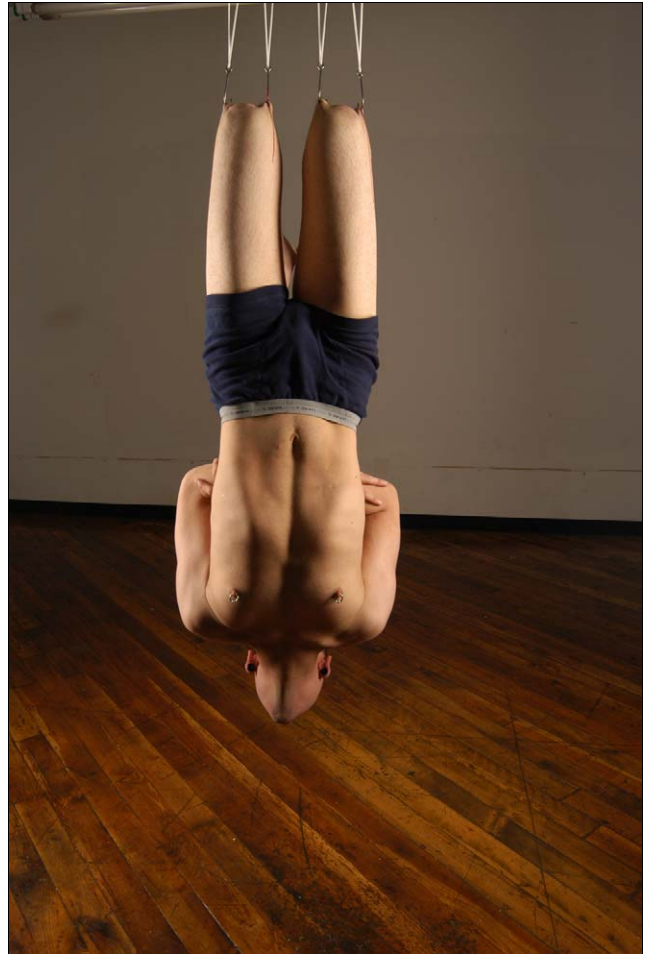


FIGURE 8
Knee suspension. (Photo courtesy of Allen Falkner; www.obscurephoto.com.)

pension and *must* inform the suspension leader of these medical conditions.

- **Post-suspension infections and pain.** The faster the hooks come out, the less they hurt, and most people do not feel the extraction of the hooks. If basic wound care measures are followed (ie, keeping the area clean and dry for a few days), infections and the associated pain and swelling are not likely to occur.⁷ To date, no infections at suspension sites have been reported in the medical literature; however, EMS providers should use appropriate universal precautions when in contact with blood or bodily fluids.
- **Post-suspension depression (PSD).** Theoretically similar to post-traumatic stress disorder, PSD is a fairly common condition with peer-reported effects ranging from hardly noticeable to fairly extreme. It is still unclear what causes this reaction, but it is surmised that both chemical withdrawal from the high levels of endorphins produced during the experience and loss of the psychological high



FIGURE 9

Tandem suspension. (Photo courtesy of MedPierce; www.MedPierce.com.)

contribute to this condition. PSD, when reported, normally starts within the first 24 hours and can last up to 3 days or more.¹¹

Are There Any EMS/ED Considerations With the Hooks?

The hooks are sharp, so care should be taken if handling the hooks or needles becomes necessary. Beyond not getting stuck, the only reason *not* to remove the hooks prior to emergency transportation would be if excessive bleeding from the wound site(s) is occurring. However, as was mentioned earlier, excessive bleeding is more likely to occur after the hooks have been removed. Thus, if the hooks are found in place and bleeding from the sites is not the primary concern, we strongly suggest allowing one of the professional piercers on site to remove the hooks prior to transport. One can easily imagine, in the case of a patient with a broken leg from a fall, that hooks in the back could impede treatment, transport, and patient comfort. However, in all but the rarest of circumstances, EMS personnel can anticipate that the hooks will be removed prior to their arrival.

Is There Anything Else We Should Know?

Body piercings, tattooing, and other modifications are nothing new and are becoming more and more common. This article may be the first to begin to specifically address the medical issues associated with suspensions. With the increasing popularity of these practices by people of all ages across the world, it is becoming increasingly necessary for emergency professionals to become more aware of these practices so that appropriate care, when necessary, can be rendered.

"I must not fear. Fear is the mind-killer. Fear is the little-death that brings total obliteration. I will face my fear. I will permit it to pass over me and through me. And when it has gone past, I will turn the inner eye to see its path. Where the fear has gone, there will be nothing. Only I will remain."

—Herbert¹²

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