

myths about body piercing

and tattooing

Can a patient with a tattoo safely have an MRI? Here's the answer to this and other piercing questions, based on the latest evidence.

WHEN PATIENTS WITH body piercings and tattoos come to your facility for care, you may hear healthcare professionals make comments like these:

- “That had to hurt!”
- “That piercing is infected.”
- “That ring has got to come out.”

But are these statements based on fact or fiction?

In this article, we'll help you sort out the myths from evidence-based reality. As nursing and piercing experts, we bring you the following “top 10” facts and fables about piercing and professional tattooing, including myths about piercings of the ear, face, tongue, navel, nipple, and genitals.

1. Body piercing and tattooing are just passing fads practiced mainly by teenagers, sailors, and bikers.

This is clearly a myth. Archaeologists and historians have noted that tattooing and body piercings have been performed all around the globe for over 5,000 years.¹ However, these practices have experienced an explosion of popularity over the last 30 years, especially in Western societies.²

Current estimates suggest that many thousands of body piercings (in parts of the body other than the ears) and tattoos are performed each year in the United States alone, and the numbers are increasing dramatically.^{3,4} In addition, the demographics of those getting piercings and tattoos are expanding dramatically. A general screening of 10,000 recipients of piercings at coauthor Elayne Angel's former studio in New Orleans, La., showed that 42% were over the age of 30. Body art professionals worldwide consistently find their crafts in demand by people of any age, race, religion, sex, and socioeconomic level.

2. "That had to hurt!"

Needles usually hurt, but pain is subjective. And the skill of the practitioner can have a considerable effect on the level of pain experienced during or after a procedure. Experienced piercers are quick and skillful, which helps minimize the pain. Many who have had piercings report that the procedure was faster and less painful than venipuncture, and others say it's virtually painless.

In the United States, professional piercers use no anesthetics, and as laypeople, they can't prescribe or offer anything. Tell your patient to avoid aspirin and ibuprofen because of their anticoagulant effect.

Tattooing takes considerably longer than piercing. Depending on the sensitivity of the area being tattooed and the style and skill of the artist, the reported level of pain or discomfort ranges from minimal to intense. In the body art industry, alcohol is *not* an acceptable preprocedure "anesthetic." Some practitioners use a Breathalyzer to identify unsuitable candidates and refuse to pierce or tattoo anyone whose blood alcohol level is over the legal driving limit.

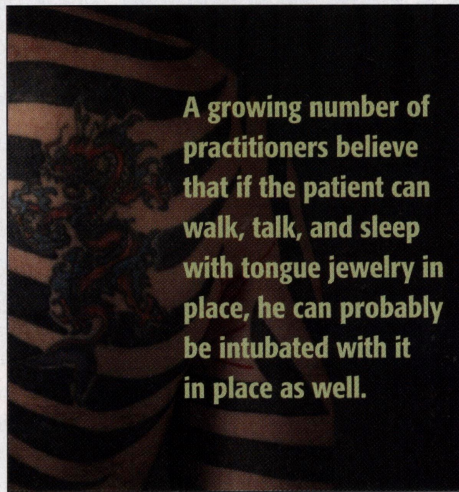
3. "That piercing is going to get infected."

Fortunately, the assumption that piercings are prone to infection is another myth. The rate of infection from piercings and tattoos is quite low when they're performed by a trained professional in a studio with sterile, disposable instruments. However, piercings and tattooing performed outside of a professional environment, by friends or by the person herself, are much more likely to become infected.⁵

Proper aftercare is important to reduce infection risk. Even if the piercing is done under ideal conditions, the client should follow appropriate hygiene and wound care practices.

Varying healing times are also a factor. For example, the healing time for

navel piercings, popular with younger people, can be more than 9 months. Some piercings, including the tongue, vertical clitoral hood, and Prince Albert (a male genital piercing), routinely heal in 4 to 6 weeks. A good blood supply helps piercings heal more rapidly, and mucous membranes heal more quickly than other types of tissue. On the other



hand, navel piercings take longer to heal because the area is less vascular and subject to excessive trauma from ordinary activities such as moving and friction from clothing. In addition, younger people may lack the dedication to care for the piercing properly, creating a potent recipe for infection.⁵

That said, a piercing that "looks funny" isn't necessarily infected. As they heal, some piercings become erythematous and edematous. These reactions are typical of an acute inflammatory process, which is the normal response to a cellular injury such as piercing. In addition, exudate may be present, another cardinal sign of acute inflammation. Remember that inflammation is the first phase of normal wound healing, so it should occur only in the initial stage of wound healing.

Determining whether or not the patient has an infection or another problem can be challenging. For example, contact dermatitis, a skin rash caused by an allergen or irritant, can look like an infectious process.

Temporary tattoos and nickel content in some body jewelry may cause contact dermatitis. Professional tattoo artists are very careful about what materials they use, but others might be providing temporary tattoos with unsafe or highly allergenic materials. An example is a dye called black henna, which may contain para-phenylenediamine.

Some inexpensive body jewelry contains nickel, one of the most common causes of allergic contact dermatitis. A person may develop a nickel allergy after an initial exposure or after repeated or prolonged contact. If you suspect allergic contact dermatitis, consult a dermatologist and advise the patient to avoid jewelry of suspicious material.

Granulomas or dysfunctional wound healing, such as hypertrophic scars and keloids, can

also complicate the picture.

4. All jewelry must be removed before surgery so it won't be in the way or fall out.

This is a myth. Most body jewelry is specifically designed to stay in place, so it's more likely to be difficult to remove than to fall off during surgery. This is even true for people with navel rings undergoing abdominal surgeries because the surgical incision is commonly made around the navel. Simply cover abdominal navel jewelry with a clear, occlusive dressing such as Tegaderm before the procedure.^{6,7}

To our knowledge, no cases of surgical complications due to piercing jewelry that was left in place have been reported. Nevertheless, some savvy patients with piercings will come in for scheduled surgeries wearing their own nonmetallic retainers to keep the tract open during surgery, a practice recommended by the American Academy of Dermatology.^{6,7} And this brings us to our next myth.

5. We can ask them to take the jewelry out for a while because the hole won't close that quickly.

Yes, another myth. Piercing professionals say that concerns about holes closing are especially valid with tongues and newer piercing sites. Piercings that haven't completed the initial healing process are extremely likely to close if left empty. As for older sites, no one can predict how soon the hole or tract will shrink. The time can vary from minutes to years.

To avoid problems and the possible need for repiercing when body jewelry needs to be removed, the patient can insert a flexible plastic barbell or retainer (available in piercing studios). If the patient hasn't done this, follow your facility's policy and procedure addressing what you should do in these circumstances.

Many women use commercially available devices during pregnancy to save their piercing as their abdomen changes size, especially during the later months.⁶⁻⁸

6. Tongue jewelry has to be removed before surgery because of the risk of complications.

Because of a lack of evidence, we'd call this more myth than reality. Healthcare professionals are concerned about possible aspiration of jewelry during intubation or airway management. Although no instances of aspiration have been published, an account was published of a patient with tongue jewelry in place who required emergency surgery. Laryngoscopy caused bleeding of her tongue, and extubation caused tongue edema. The patient's airway was difficult to manage, making her a near miss for a life-threatening "cannot intubate, cannot ventilate" situation.⁹ Four case reports detail successful bag-valve-mask ventilation, laryngeal mask airway placement, and intubation with tongue jewelry remaining in place. Three articles detail complications of nasal jewelry displacement associated

with intubation, and two cases address localized bleeding of the tongue associated with direct laryngoscopy.⁸ Even so, a growing number of practitioners believe that if the patient can walk, talk, and sleep with tongue jewelry in place, he can probably be intubated with it in place as well.⁸

On the other hand, not only could a clumsy attempt at tongue jewelry removal cause a delay, but it also could very possibly result in jewelry being dropped into the airway.

Although a person's tongue may swell considerably after initial piercing, edema interfering with oral intubation has never been documented.

7. Nipple-piercing jewelry must be removed before defibrillation and electrocautery.

All indications tell us that needing to remove nipple jewelry before defibrillation is a myth, especially if removing this jewelry would delay defibrillation. If defibrillation is needed, we recommend that pads or paddles not be put directly over any piercing and that they be placed at least 1 inch (2.5 cm) away from it (as is the guideline in the case of implantable medical devices).¹⁰

Although it's generally accepted practice to request the removal of metallic body jewelry near the area of electrocautery to minimize the risk of burns, little evidence supports the concern about electrocution or burns. Certainly the best practice is for the patient to remove any and all jewelry and leave those items at home, if at all possible.

However, if jewelry items (including piercings) can't be removed safely and easily, those items should be covered with gauze and taped in place. Jewelry left on the patient shouldn't be positioned within the area of electric current. Even though the risk of electrosurgical injury due to jewelry is minimal, precautions should still be taken.¹¹

8. Body jewelry should always be removed for X-rays and other diagnostic imaging studies. Tattoos will heat up and cause burns during magnetic resonance imaging (MRI).

Popular myths, but myths nonetheless. As long as body jewelry isn't directly in the area of examination, it won't affect X-rays or computed tomography scans. If the jewelry appears to be in the way, the radiology technologist may be able to position the patient or the equipment so that the images are taken from different angles to avoid unnecessary jewelry removal. An exception is mammography; nipple rings must be removed to avoid a possible misdiagnosis.¹²

When preparing a patient for an MRI, follow the policies of your institution and be aware of the guidelines of the American College of Radiology. All readily removable metallic objects should be removed before entering the area of the magnet. This includes personal belongings (rings, watches, keys, pagers, cell phones, and body jewelry) because ferrous metals can be affected by magnets. Gold or silver dental fillings and surgical implants that are confirmed as nonferrous aren't contraindications for MRI. However, research shows that the majority of quality body jewelry that's made of titanium, niobium, or surgical stainless steel isn't ferromagnetic and won't be attracted to the MRI magnet. Therefore, unless the jewelry is directly in the way of the area to be imaged, if it's not easily removed or the patient refuses to remove it, the radiologist may consider performing the imaging with the jewelry in place.¹²⁻¹⁴

According to the FDA, in very rare instances people with tattoos or permanent cosmetics have experienced edema or burning in the tattoo during MRI; tattoo pigments can also interfere with the quality of MRI images. With that in mind, several medical centers have revised their pre-MRI checklists to include this question: "Do you have any

body piercings, tattoos, or cosmetic tattoos used for permanent makeup, such as eyeliner, lip liner, or lipstick, or to replace a nipple after breast surgery?"¹¹ Patients with tattoos need to inform the radiologist or technologist so appropriate precautions can be taken.¹⁵

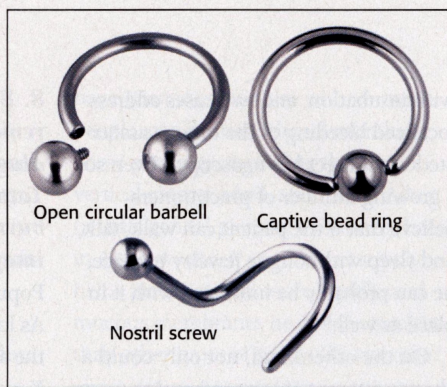
9. Piercings are in the way and interfere with any medical interventions that may need to take place in the genital area.

Mostly myth, but read on. The jewelry used in these piercings can often remain in place for urinary catheterization, childbirth, and pelvic exams. An exception is when urinary catheterization must be performed on a man wearing body jewelry that traverses the urethra. This is the case with piercings called a Prince Albert, a Reverse Prince Albert, or an Apadravya. The Prince Albert piercing is made on the underside of the penis at the juncture of the head and shaft; the jewelry rests within the urethra and is worn out of the tip of the urinary meatus. The reverse Prince Albert is a midline vertical placement that passes from the urethra to the top of the glans. The Apadravya piercing passes through the glans vertically. Ampallangs pass through the glans horizontally and may or may not transect the urethra.

Most obstetric professionals recommend removing labial jewelry for vaginal births, but many obstetric nurses report that babies have been successfully delivered to mothers with these piercings before jewelry was even mentioned. No cases have been documented of medical complications that resulted from keeping genital jewelry in place for childbirth.^{16,17}

10. When in doubt...cut it out!

Thankfully, this, too, is a myth. Staff at every hospital should know how to properly remove the most common types of jewelry (captive rings, barbells,



and nostril screws). In addition, healthcare professionals should be familiar with and have access to equipment such as ring-opening pliers that can help to remove body jewelry. Using the appropriate equipment will prevent jagged edges on the jewelry and skin trauma that bolt cutters or other devices can cause.¹⁸

The big picture

As body art evolves, healthcare professionals need to know more about it. Talk with your patients. Seek out body artists and raise questions for further study. Research is needed to determine best practices and develop a national database on medical complications.

The increasingly widespread popularity of piercings and tattoos makes it likely that you'll be dealing with patients who have them. When you're equipped with the facts, you improve patient safety, patient comfort, and quality of care. ♦

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RESOURCES

- Alliance of Professional Tattooists <http://www.safe-tattoos.com>
 - Association of Professional Piercers <http://www.safepiercing.org>
 - The Body Art Team, Texas Tech University <http://www2.tlct.ttu.edu/jkoch/research/tattoo%20team.htm>
- Web sites accessed October 2, 2008.

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