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Health: Contact Dermatitis

Beware of nickel and ivy

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The two most common causes of contact dermatitis in New Orleans are poison ivy and jewelry (yes, jewelry). It is all thanks to element No. 28 on the periodic table. Contact to nickel is

a common cause of neck and earlobe rashes. A dermatology group proclaimed nickel the 2008 “Allergen of the Year.”

“Pustular, weeping and oozing” is how Dr. Nia Terezakis, queen of New Orleans dermatology, describes the allergic contact dermatitis associated with nickel.

“People think they have an infection and make two big mistakes. First, they try to treat it with Neosporin. And then they keep wearing the jewelry.”

Terezakis talked with me one recent Saturday morning at a PJ’s Coffee in the Warehouse District. She characterizes nickel as a very strong sensitizer. This means that one could be exposed many times before one sees or feels an allergic reaction or, in medical jargon, that prior contacts precede any active dermatitis.

Moisture and humidity have important supporting roles, providing a conduit between the metal and the skin for the migration of nickel ions. In the right setting, the dermatitis starts as a cutaneous reaction, usually beginning with redness and itching. The allergic reaction progresses with localized swelling and inflammatory changes including pus, blisters and skin fissures (cracks).

Nickel has several properties that make it popular with jewelry makers – it’s hard and cheap with a long-lasting shine. When mixed with softer and more precious metals such as gold or silver, the resultant alloy is harder and more durable. Polished nickel has a shiny appearance and is less likely to tarnish than silver. And thanks to extensive Canadian mineral reserves, nickel remains a relatively inexpensive metal.

The nickel coin has always been popular with New Orleanians, but the modern day nickel contains more copper than nickel. Even the once-locally disfavored “silver dime” contains nickel and copper without a blush of silver. As anyone who tried to salvage coin collections from flooded houses after Hurricane Katrina knows, water plus metal equals corrosion unless the metal is platinum or high-grade gold. The chemical process for this is called oxidation and the same thing happens when sweat or humidity meets jewelry with a high nickel content.

Your biggest, butchest, hairiest plumber can be plagued with the same skin condition that haunts the heir to a Carnival Queen’s costume jewelry. Nickel allergy can occur wherever nickel meets the skin. In addition to earrings and earring posts, nickel is often used in necklaces, eyeglass frames, clothing snaps, watches, watchbands, buttons, zippers, buckles and even telephone dialing pads. According to Terezakis, the closer the contact between the skin and the metal, the greater the likelihood to develop the dermatitis. For example, a hanging necklace plastered against a bare chest on a hot, humid summer day is a more likely culprit than a loosely hanging cross with maybe an even higher nickel content.

New Orleans was once the epicenter of contact dermatitis expertise. Dr. Robert Rietschel, a former dermatology head at Ochsner, published scores of papers during his tenure at Ochsner and was editor of Fisher’s Contact Dermatitis, the bible for the field. According to Terezakis, the current local academic heavyweights in the contact dermatitis field are Dr. Lee Nesbitt at Louisiana State University and Dr. Erin Boh at Tulane University.

Local factors and variable exposures of some sort play a part in the who, what, when and where of contact dermatitis. Some folks develop the problem in childhood, others as adults, and lucky ones never do (even if they wear the same causative jewelry). With earrings, sometimes just one earlobe is affected.

Loosely worn adornments are less likely to sensitize than ones with flush skin contact. The rash typically develops for the first time a few days after the exposure, but with repeated exposure some itching might be noticeable an hour or two after putting on the jewelry.

Upgrading to more expensive jewelry doesn’t always solve the problem. The exposure required to develop an allergy varies, depending on the person’s sensitivity; an allergy may develop after repeated or prolonged exposure, or even after just a brief exposure.

“In general, 18 karat gold is less likely to cause contact dermatitis, but not always. Some very expensive gold earrings have a clip on the back made with a cheaper nickel-containing metal,” said Terezakis, whom I suspect is as knowledgeable about jewelry as she is about dermatology. “When the earring clip is the culprit, the dermatitis starts on the back of the earlobe.

“In these cases I tell my patients to do what I do. I have this pair of clip-on costume jewelry earrings I just love to wear to cocktail parties. I position a thin button or a plastic sequin between the clip and my earlobe. It usually works, but sometimes I notice a slight itch, the beginning of contact dermatitis. I just slip into the ladies’ room and change earrings,” says Terezakis.

“I have even seen men wearing Rolex watches with contact dermatitis on their wrist. A high-grade gold or even stainless steel watch may have a back made of a cheaper metal,” said Terezakis, who emphasizes that allergic contact dermatitis isn’t limited to earlobes or the areas around necklace hangings. “Men, women, and children who develop a circular area of contact dermatitis on the lower abdomen usually have been wearing pants or jeans with a metal button.”

Treatment is simple and basic. Terezakis advises gently washing and removing any crusts with a cotton ball dipped in warm, soapy water. Dry well and don’t put any jewelry back on until the area has completely healed. Definitely don’t apply any antimicrobial cream like Neosporin or Bacitracin as these cream are also often irritants themselves. And if the involved area is an earlobe, keep all earrings off the ear until the area has completely healed. Even a non-nickel-containing earring can encourage moisture buildup that will delay healing.

Cell phone contact dermatitis

Facial allergic contact dermatitis is an emerging disorder related to the increasing use of cells phones. The first case was reported in Italy in 2000. More recently, North Carolina dermatologists described a 28-year-old woman with “an isolated itchy, dry patch on her right cheek. On physical exam there was a patch of dermatitis on her right jaw line that corresponded with the spot where the metallic menu button on her cell phone contacted her skin. She was clinically diagnosed with allergic contact dermatitis.”

“The most common cell phone sites containing free nickel include the decorative logos on headsets, menu buttons and the metal frames around the liquid crystal display. Thus, cell phone contact dermatitis typically presents as patches of dermatitis involving areas of the unilateral ear and/or face that correspond to the metal parts of the cell phone that touch the face.”

“Treatment for cell phone contact dermatitis includes covering the cell phone with a plastic film, using a wireless ear piece, or switching to a different cell phone that does not contain metal on surfaces that contact the skin. In the case of nickel allergy, patients can purchase nickel spot-test kits from their local pharmacy and can easily test phones for free nickel before purchasing or using them.”

Source: Cell phone allergic contact dermatitis: Dermatology Online Journal, Volume 16, June 2010

Piercings and metal allergies

Dermatologists nationwide report all sorts of skin complications related to piercings. Elayne Angel, a professional body piercer and author of *The Piercing Bible –The Definitive Guide to Safe Body Piercing*, attributes problems to poorly trained and inexperienced “mall piercers.” She has done some 40,000 piercings, including 40 on herself.

“There is a lot of junk body jewelry on the market, and it can cause negative reactions. In my practice in New Orleans, I do not believe I ever saw a nickel reaction in one of my clients. Dermatitis from harsh soaps was far more common, and also irritation from friction and trauma,” emailed Angel, who was on her way to a piercing gig in California.

Angel lived in the French Quarter for 12 years and was a walking advertisement for her Rings of Desire Studio, even though not all of her 40 piercings were available for public

viewing. Angel prides herself on using quality metals and says her customers almost never have problems if they follow her after-care instructions. She travels back to New Orleans a couple of times a year for both old and new clients who seek her piercing expertise. To order her book or read a free pamphlet called "Body Piercing Troubleshooting For You and Your Healthcare Professional," check out her website at PiercingBible.com.