30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

BREASTS, BELLIES, BELOW, AND BEYOND: BODY PIERCING JEWELRY AND THE TRANSFER TECHNIQUE—WHEN IN DOUBT, DON'T **Necessarily Take It Out!**

Authors: Scott DeBoer, MSN, RN, CEN, CPEN, CCRN, CFRN, EMT-P, Michael Seaver, RN, David Vidra, CLPN, WCC, MA, Bill Robinson, and Jennifer Klepacki, Chicago and Vernon Hills, IL, Dyer, IN, Cleveland, OH, Las Vegas, NV, Southington, CT

body piercing, or implants, have been practiced in subjective difficulties on obtail fourth our beautile rotationing, years, these practices have become more common widespread, moving beyond what we might have previously considered a curious subculture of practitioners. The implications on emergency nursing care have also become more evident as we strive to understand and provide optimal care for this ever-increasing segment of our population. This article reviews the transfer technique of exchanging body piercing jewelry with an intravenous catheter to maintain piercing patency.

In a recent study of U.S. undergraduate college students, 51% had something pierced besides their ears. That means that in this study, odds were better than a "coin flip" as to whether a young adult had body piercings (and 22% had tattoos as well). Although no formal statistics exist regarding the number of body piercings performed each year, it is estimated that at least several hundred thousand body piercings are performed annually, and that number is not declining (E. Angel, oral commu-2Q2 nication, December 2010).

Scott DeBoer is Flight Nurse, University of Chicago Hospitals, Chicago, IL, and Founder, Peus-K-US Medical Education, Dyer, IN.

Michael Seaver is Senior Healthcare Informatics Consultant, Vernon Hills, IL. David Vidra is a Body Piercer and President, Health Educators, Inc, Cleveland, OH.

Bill Robinson is a Body Piercer, Starlight Tattoo, Las Vegas, NV. Jennifer Klepacki is an Artist and Illustrator, Southington, CT. For correspondence, write: Scott DeBoer, MSN, RN, CEN, CPEN, CCRN, CFRN, EMT-P, 9052 Beall St, Dyer, IN 46311; E-mail: scott@peds-r-us.com. J Emerg Nurs ■.

0099-1767/\$36.00

5

6

9

18

11

12

13

14

15

16

17

18

19

20

22

23

24

25

26

27

2**Q**1

Copyright © 2011 Emergency Nurses Association. Published by Elsevier Inc. All rights reserved.

doi: 10.1016/j.jen.2011.03.001

With the recent "epidemic" of body piercings, it has become increasingly common to remove body jewelry for diagnostic imaging (computed tomography/magnetic resonance imaging) or surgical procedures. However, the question of whether removal of the jewelry is indeed necessary, especially for elective or non-emergency health care, continues to be debated in the medical literature. For example, does tongue jewelry need to be removed for emergent intubation? (No; intubate first, then worry about removing the jewelry later.) Do nipple piercings need to be removed prior to defibrillation? (No.) Does a piercing need to be removed if the site is infected? (No, or an abscess can form.) Does a penile piercing need to be removed prior to placement of a Foley urinary catheter? (Sometimes, depending on whether the piercing crosses the urethra.)^{3,4} For many medical procedures and types of body jewelry, the jury is still out and the verdict has yet to be decided.

Removal of body jewelry for procedures has raised concerns among patients about maintaining patency of the piercing tract. When experienced body piercers are asked how long a piercing "hole" stays open once the jewelry has been removed, the most common answer is simply, "We just don't know." Certainly, piercing tracts that have been in place for many years have a better chance of staying open for a longer period when the jewelry is removed, but the truth is we just don't know how long any tract will stay open. According to

nrofessional hody niercers the only reliable way to ensure that

the piercing tract remains open is to keep something in it. In the past, several anesthesia and surgical journal articles have described the use of various sorts of retainers (ranging from epidural catheters to intravenous extension tubing) to attempt to keep the hole open.^{2,5-9} Although some retainers for body jewelry are commercially available, the experience of several body piercers is that these devices can come apart more easily than conventional metal jewelry, 64 making them potentially less desirable. These retainers have a shape that is similar body jewelry, but they generally are 66 non-metallic and either clear or flesh colored. It is important

61 62 65

WWW JENONLINE ORG

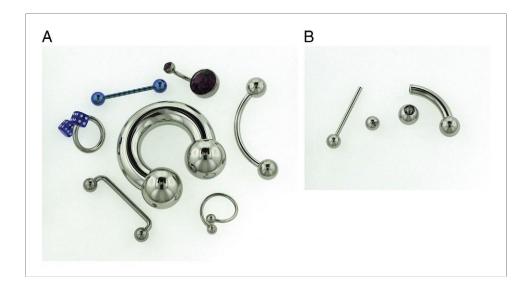


FIGURE 1

Various types of barbell body jewelry: A, closed; B, open. Remove one end of the barbell by twisting counterclockwise and maintaining a grasp on the other end of the jewelry. (Photos courtesy of Anatometal, www.anatometal.com.) This figure can be viewed in color and as a full-page document at www.jenonline.org.

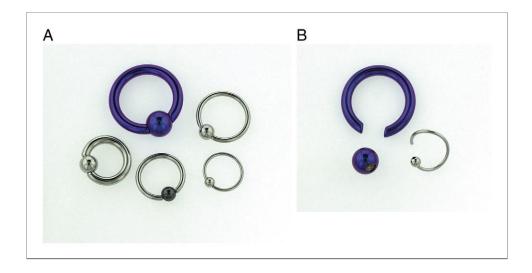


FIGURE 2

68

69

70

71

72

73

74

75

76

Various types of ring body jewelry: A, closed; B, open. Removal is best accomplished with the use of ring-opening pliers. (Photos courtesy of Anatometal, www.anatometal.com.) This figure can be viewed in color and as a full-page document at www.jenonline.org.

to note that many retainer materials have not been specifically approved for medical use. ⁷⁻¹⁰

In the emergency department, we suggest using a very cost-effective device—intravenous catheters. Whereas arguments have been published both for and against the routine removal of body jewelry for diagnostic imaging and surgical procedures, the focus of this article is to demonstrate step-by-step transfer techniques that can be used to maintain piercing patency. These techniques work not only in the

navel but for many other areas above, below, and beyond the navel (Figures 1-20, Tables 1 and

In summary, some medical practitioners routinely 79 recommend that all jewelry come out, whereas others 80 believe that a selective approach to the removal of body

jewelry is appropriate. If the removal of facial or oral jew- 82 elry is to be undertaken, the utmost care should be taken to 83 minimize the risk of jewelry aspiration, which can be done 84 through the use of upright or lateral positioning, gauze 85

IOURNAL OF EMERGENCY NURSING

2).

78

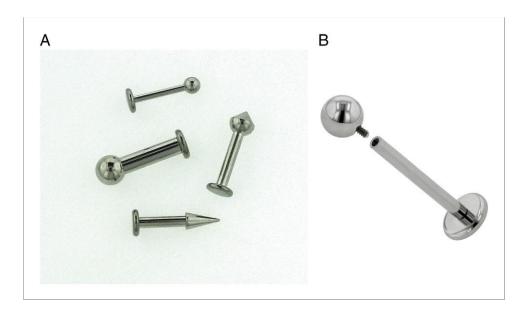


FIGURE 3

Various types of labret body jewelry: A, closed; B, open. Remove one end of the labret by twisting counterclockwise and maintaining a grasp on the other end of the jewelry. (Photos courtesy of Anatometal, www.anatometal.com.) This figure can be viewed in color and as a full-page document at www.jenonline.org.

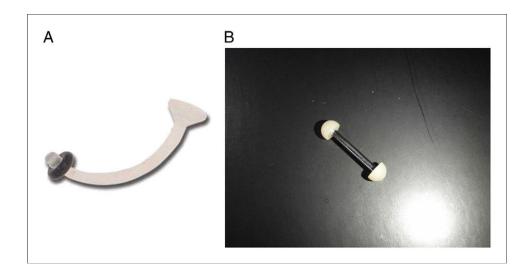


FIGURE 4

86

87

88 89

90

Commercially available navel (A) and tongue (B) body piercing jewelry retainers. (Jewelry retainer photos courtesy of Tribalectic, www.tribalectic.com.) This figure can be viewed in color and as a full-page document at www.jenonline.org.

packing, and possibly hemostats.⁷ Certainly, for patients in critical condition, life-saving procedures such as defibrillation or airway management should be performed first and jewelry removal issues addressed later. If time and the patient condition permits, consideration should be given to the use of a transfer technique to maintain piercing

patency. Maintaining piercing patency will increase patient 92 satisfaction and possibly save the patient from the pain and 93 expense of undergoing replacement body piercing proce- 94 dures. Cultural sensitivity, which continues to be a focus 95 in emergency health care, should involve not only race or 96 religion but body art and body modifications as well.

97

Q4





Ring-opening pliers, which are needed for safe removal of ring type body jewelry. (Photo courtesy of Peds-R-Us Medical Education [www.Peds-R-Us.com], with ringopening pliers provided by Industrial Strength Needles [www.isneedles.com].) This figure can be viewed in color and as a full-page document at www.jenonline.org.



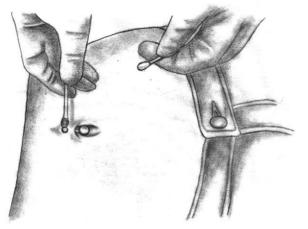


FIGURE 6

98

99

100

101

102

103

104

105

Transfer technique—navel jewelry. Step I: While utilizing universal precautions, cleanse the site with antimicrobial agents per hospital policy. (Photo from the Body Piercing Removal Photo Guide courtesy of Peds-R-Us Medical Education [www.Peds-R-Us.com]. Medical illustration courtesy of Jennifer Klepacki [www. theconjured.com].) This figure can be viewed in color and as a full-page document at www.jenonline.org.

Acknowledgment

We thank Elayne Angel from Rings of Desire, New Orleans, LA (www.ringsofdesire.com) and Troy Amundson from Apocalypse Piercing, Seattle, WA (www.apocalypsetattoo.com) for their invaluable help in creating Table 2.

REFERENCES

1. Mayers L, Chiffriller SH. Body art (body piercing and tattooing) among undergraduate university students: "then and now". J Adolesc Health. 2008;42(2):201-3.

- 2. DeBoer S, Fishman D, Chwals W, Straus C, Amundson T. Body piercing/tattooing and trauma diagnostic imaging: medical myths vs. realities. J Trauma Nurs. 2007;14(1):35-8.
- 3. DeBoer S, Seaver M, Angel E, Amunson T. Body piercing jewelry removal: the professional piercer's perspective. J Emerg Nurs. 2005; 32(2):159-64.
- 4. DeBoer S, McNeil M, Amundson T. Tubing & tongues: body piercing and airway management. Pediatr Emerg Care. 2006;2(10):755-8.
- 5. Brown D. Anesthetic considerations of a patient with a tongue piercing, and a safe solution. Anesthesiology. 2000;93:307-8.

106 108 109

107 110

111 112 113

114 115



Transfer technique—navel jewelry. Step II: Remove one end of the navel jewelry by twisting counterclockwise while maintaining a grasp on the other end of the jewelry. (Photofrom the Body Piercing Removal Photo Guide courtesy of Peds-R-Us Medical Education [www.Peds-R-Us.com]. Medical illustration courtesy of Jennifer Klepacki [www.theconjured.com].) This figure can be viewed in color and as a full-page document at www.jenonline.org.



FIGURE 8

Transfer technique—navel jewelry. Step III: Before removing the jewelry, place a 20 g or 22 g intravenous catheter (with no needle) against the open end of the jewelry. (Photofrom the Body Piercing Removal Photo Guide courtesy of Peds-R-Us Medical Education [www.Peds-R-Us.com]. Medical illustration courtesy of Jennifer Klepacki [www.theconjured.com].) This figure can be viewed in color and as a full-page document at www.jenonline.org.

- 116 117
- Cornetta A, Reiter D. Ear piercing for individuals with metal hypersensitivity. Otolaryngol Head Neck Surg. 2001;125(1):93-5.
- DeBoer S, McNeil M, Amundson T. Body piercing and airway management: photo guide to tongue jewelry removal techniques. AANA J. 2008;76(1):19-23.
- 8. Mackenzie I. Sleepers for body piercing. Anaesthesia. 2000;55:1143.
- Muensterer O. Temporary removal of navel piercing jewelry for surgery and imaging studies. Pediatrics. 2004;114:384-6.
- Armstrong M, Caliendo C, Roberts A. Pregnancy, lactation, and nipple piercings. AWHONN Lifelines. 2006;10(3):212-7.

121 122

123 124

125



Q6 FIGURE 9

Transfer technique—navel jewelry. Step IV: Slowly withdraw the navel jewelry while introducing the intravenous catheter into the piercing tract. Once the intravenous catheter has been completely inserted, fully remove the body jewelry. (Photo from the Body Piercing Removal Photo Guide courtesy of Peds-R-Us Medical Education [www.Peds-R-Us.com]. Medical illustration courtesy of Jennifer Klepacki [www.theconjured.com].) This figure can be viewed in color and as a full-page document at www.jenonline.org.



FIGURE 10

Transfer technique—navel jewelry. Step V: Successful removal of jewelry and replacement with catheter. (Photo from the Body Piercing Removal Photo Guide courtesy of Peds-R-Us Medical Education [www.Peds-R-Us.com]. Medical illustration courtesy of Jennifer Klepacki [www.theconjured.com].) This figure can be viewed in color and as a full-page document at www.jenonline.org.



Transfer technique—navel jewelry. Step VI: After the successful transfer, cover the site with a clear, bio-occlusive dressing such as a Tegaderm or Opsite. (Photo from the Body Piercing Removal Photo Guide courtesy of Peds-R-Us Medical Education [www.Peds-R-Us.com]. Medical illustration courtesy of Jennifer Klepacki [www.theconjured.com].) This figure can be viewed in color and as a full-page document at www.jenonline.org.



FIGURE 12

Transfer technique—tongue jewelry. Step I: While utilizing universal precautions, remove one end of the jewelry by twisting counterclockwise and maintaining a grasp on the other end of the jewelry. Then place a 20 g or 22 g intravenous catheter (with no needle) against the open end of the jewelry. (Photo from the Body Piercing Removal Photo Guide courtesy of Peds-R-Us Medical Education [www.Peds-R-Us.com]. Medical illustration courtesy of Jennifer Klepacki [www.theconjured.com].) This figure can be viewed in color and as a full-page document at www.jenonline.org.

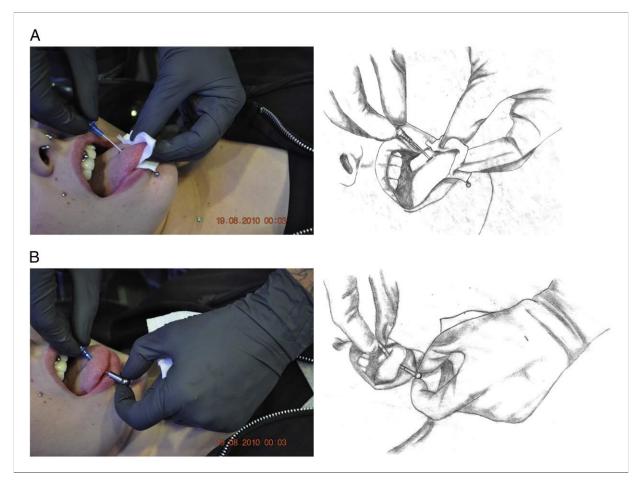
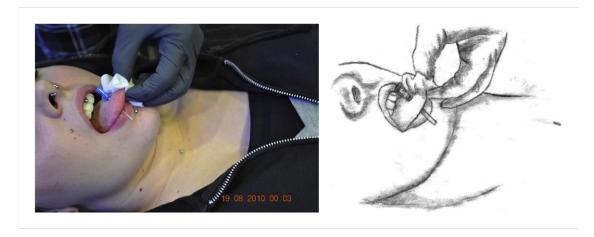


FIGURE 13

Transfer technique—tongue jewelry. Steps IIa (A) and IIb (B): Slowly withdraw the tongue jewelry while introducing the IV catheter into the piercing tract. (Photo from the Body Piercing Removal Photo Guide courtesy of Peds-R-Us Medical Education [www.Peds-R-Us.com]. Medical illustration courtesy of Jennifer Klepacki [www.theconjured.com].) This figure can be viewed in color and as a full-page document at www.jenonline.org.



Transfer technique—tongue jewelry. Step III: Once the intravenous catheter has been completely inserted, fully remove the body jewelry. (Photo from the Body Piercing Removal Photo Guide courtesy of Peds-R-Us Medical Education [www.Peds-R-Us.com]. Medical illustration courtesy of Jennifer Klepacki [www.theconjured.com].) This figure can be viewed in color and as a full-page document at www.jenonline.org.



FIGURE 15

Transfer technique—tongue jewelry. Step IV: 20 g intravenous catheter secured with size 0 suture. (Photo from the Body Piercing Removal Photo Guide courtesy of Peds-R-Us Medical Education [www.Peds-R-Us.com]. Medical illustration courtesy of Jennifer Klepacki [www.theconjured.com].) This figure can be viewed in color and as a full-page document at www.jenonline.org.



Transfer technique for ear piercing with 22 g intravenous catheter. (Photo from the Body Piercing Removal Photo Guide courtesy of Peds-R-Us Medical Education [www.Peds-R-Us.com].) This figure can be viewed in color and as a full-page document at www.jenonline.org.



FIGURE 18

Transfer technique for lip piercing with $22\,$ g intravenous catheter. (Photo from the Body Piercing Removal Photo Guide courtesy of Peds-R-Us Medical Education [www.Peds-R-Us.com].) This figure can be viewed in color and as a full-page document at www.jenonline.org.



Q5 FIGURE 17

Transfer technique for nostril piercing with 22 g intravenous catheter. (Photo from the Body Piercing Removal Photo Guide courtesy of Peds-R-Us Medical Education [www.Peds-R-Us.com].) This figure can be viewed in color and as a full-page document at www.jenonline.org.

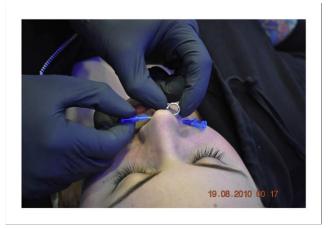


FIGURE 19

Transfer technique for nasal septal piercing with 22 g intravenous catheter. (Photo from the Body Piercing Removal Photo Guide courtesy of Peds-R-Us Medical Education [www.Peds-R-Us.com].) This figure can be viewed in color and as a full-page document at www.jenonline.org.



A piercing transfer technique model demonstrating septum, cheek, and lip intravenous catheter retainers. This figure can be viewed in color and as a full-page document at www.jenonline.org.

TABLE 1

Body parts for which transfer techniques have been used successfully

- · Ear
- · Eyebrow
- · Nostril
- · Septum
- · Cheek
- · Tongue
- · Lip
- · Nipples
- · Navel
- · Male and female intimate areas

t1.1

t0.2 t0.3

t0.4 t0.5

t0.6

t0.7

t0.8

t0.9 t0.10

t0.11

t0.12

t0.13

Q7	TABLE 2		
t0.2	Type of piercing	Anatomical location of the jewelry	Common types of jewelry placed
0.3	Ampallang	Horizontally through the glans (spongy head of the penis) and through the urethra	Barbell
0.4	Apadravya	Vertically through the glans (spongy head of the penis) and urethra and out on the head in front of the coronal ridge (you get a free Prince Albert with every apadravya)	Barbell
0.5	Branding	You name it, it's been branded	N/A
0.6	Cheek	Through the buccinator muscle, between the facial artery and vein	Barbell with a disc back on the inside
0.7	Chest (surface)	Usually between the jugular notch and superior to the xiphoid process (front of the chest)	Surface barbell
8.0	Christina	Vertically just below the mons pubis, superior to the anterior commissure of labia majora (on the pubic mound and above the vagina)	Barbell
0.9 0.10	Clitoral hood (vertical)	Vertically through the prepuce (thin bit of tissue) above the clitoris (not through the clitoris itself)	Bent barbell or ring
0.11	Clitoris	Self explanatory; very rare	Ring
0.12	Cutting	Through the epidermis and dermis into the subcutaneous tissue	N/A
0.13 0.14 0.15	Dermal anchors (also known as microdermals)	Just about anywhere on the skin	Dermal anchors
0.16	Dydoe	Top and sides rim of glans (spongy head of penis) through the coronal ridge (commonly done in pairs)	Curved barbell
0.17	Ear (daith)	Through the crux helix or innermost ridge of cartilage above the tragus (cartilage in front of the ear canal opening)	Ring
0.18	Ear (cartilage)	Commonly refers to the helix of the ear; conch, daith, rook, and tragus are all cartilage piercings	Barbell, ring, or circular barbell
0.19	Ear (conch)	The concha (shell of the ear) may be pierced in many different directions	Barbell, ring, circular barbell, plug, or eyelet
0.20	Ear (head)	Juncture of the ear and head in the cartilage	Ring, barbell, or mini-barbell
).21	Ear (lobe)	Lobule (traditional) or transverse lobe piercing	Transverse barbell or ring
0.22	Ear (rook)	Crura of antihelix, opposite of the crus of the helix—through the antihelix (upper ridge of cartilage in the ear)	Barbell or ring
0.23	Ear (tragus)	Through the prominence of cartilage in front of the opening of the ear canal	Barbell or ring
0.24	Earl (mid brow)	Below the glabella and above the nasal bone (middle of an eyebrow)	Barbell
0.25	Etching	Anywhere on the skin	N/A
0.26	Eyebrow	Through the soft tissue, behind the eyebrow ridge	Barbell or ring
).27	Foreskin	Self-explanatory	Barbell or ring
0.28	Fourchette	Vertical perineum piercing from the vestibular fossa to the posterior commissure of the labia majora (female Guichet)	Bent barbell

	Table 2		
0.29	Continued Type of piercing	Anatomical location of the jewelry	Common types of jewelry placed
0.30	Frenum	Loose piece of flesh between the head and shaft of the penis—not through the shaft itself—anywhere on the shaft where it is possible to pinch up the tissue—your imagination and "pinchability factor" of the tissue are the main limitations	Barbell, rows of jewelry, or a large ring that fits snugly around the erect head of the penis (once fully healed)
).31	Guichet	In the urogenital triangle, behind the pubic symphysis near the prostate (inseam of flesh between the scrotum and anus)	Ring or curved barbell
0.32	Hafada	Anywhere on the scrotum, typically near the top and in pairs	Barbell or ring
0.33	Hand (web)	Between the fingers	Barbell or ring
).34	Implants	Facial, sternal, arms, and genitals	Titanium, Teflon, silicone, pearl, stainless steel implants (eg, shapes and horns)
0.35	Labia (inner)	Labia minora	Rings
0.36	Labia (outer)	In the pudendal cleft, behind the labia majora	Captive rings, bead rings, or circular barbells
).37	Labret	Through the inferior part of the orbicularis oris muscle (below the lower lip and above the chin)	Disc back barbell or fishtail
.38	Lingual frenulum	Laterally, through the frenulum (web under the tongue)	Barbell or ring
.39	Lip (side)	Just above or below the tubercle of the lip (side of the lip)	Ring or circular barbell
0.40	Lorum	Like a frenum, but lower-um (juncture of penile shaft and scrotum in the center)	Ring or barbell
).41	Madison (mid neck)	Superior to the jugular notch (front of the neck) near the insertion of the sternocleidomastoid muscles	Surface barbell or Tygon
0.42	Nape (back of neck)	Between the external occipital protuberance and the spinous process of the vertebrae (back of the neck)	Surface barbell
0.43	Nasal septum	Between the major alar cartilage and the nasal septal cartilage (in the middle of the nose)	Barbell, circular barbell, ring, plug, septum spike or tusk
).44	Navel	Usually above but not through the umbilicus (belly button)	Curved barbell, circular barbell, or ring
.45	Nipple	Between the nipple and the areola (vertically or horizontally)	Barbell, circular barbell, or ring
0.46	Nostril	Between the greater and lesser alar cartilage (outside of the nose)	Nostril screw, nose bone, or ring
).47	Prince Albert	In the underside of the glans (spongy head of penis) and out through urethra	Captive ring, circular barbell, or curved barbell
0.48	Princess Albertina (female Prince Albert)	Through the lower portion of external urethral orifice, resting within the vagina	Barbell or ring
0.50	Pubic (male)	Placed in the natural juncture where the pubic mound and the shaft of the penis meet	Ring
).51	Reverse Prince Albert	In the top of the glans (spongy head of penis) near the center and out through the urethra	Ring or circular barbell
).52	Surface	You name it, something can go under it; also see implants	Surface barbell or Tygon
.53	Tattoos	You name it, it's been inked	N/A
).54	Tongue	Vertically through the midline groove and lateral fold of the tongue, although some get venoms or snake bites through the sides of the tongue	Barbell
		anough the sides of the tongue	(continued on next page

ARTICLE IN PRESS

CLINICAL/DeBoer et al

	Table 2 Continued		
t0.55	Type of piercing	Anatomical location of the jewelry	Common types of jewelry placed
t0.56	Tongue (tip)	Vertically through the apex (tip) of the tongue	Ring or barbell
t0.57	Triangle	Horizontal piercing behind the nerve bundle of the clitoris at the base of the hood tissue where it forms from the body	Circular barbell, barbells, bent bars, or rings
t0.58	Uvula	Self-explanatory	Barbell or rings

Journal : YMEN Article No : 1986

Author Query Form



Dear Author,

During the preparation of your manuscript for typesetting some questions have arisen. These are listed below. Please check your typeset proof carefully and mark any corrections in the margin of the proof or compile them as a separate list*. This form should then be returned with your marked proof/list of corrections to Dartmouth Journal Services.

Dia	sk use	
	some instances we may be unable to process the electronic file of your article and/or artwork. In that case we have, for	
	iciency reasons, proceeded by using the hard copy of your manuscript. If this is the case the reasons are indicated below:	
	Disk damaged Incompatible file format LaTeX file for non-LaTeX journal	
	Virus infected Discrepancies between electronic file and (peer-reviewed, therefore definitive) hard copy.	
	Other:	
We	e have proceeded as follows:	
	Manuscript scanned □ Manuscript keyed in □ Artwork scanned	
	Files only partly used (parts processed differently:)	
Bik	oliography	
If o	discrepancies were noted between the literature list and the text references, the following may apply:	
	The references listed below were noted in the text but appear to be missing from your literature list. Please complete the list or remove the references from the text.	
	Uncited references: This section comprises references which occur in the reference list but not in the body of the text. Please position each reference in the text or, alternatively, delete it. Any reference not dealt with will be	

Queries and/or remarks

retained in this section.

Query markers	Details required	Author's response
Q1	Please note Journal style for references: References should be numbered in consecutive order as they appear in the text, and mention in the text is by number, not by last name of author.	
Q2	Please note that per Journal style, personal communications are not listed as references but are mentioned in the text.	
Q3	Please check all figures to ensure that legends correspond to the correct images.	
Q4	Figure 4: Please verify accuracy of figure parts and legend. The .jpg image provided for B, tongue retainer, did not exactly match image shown in PDF	
Q5	Figure 17 was taken from the Word file (there was no original .tif or .jpeg). Please provide .tif or .jpg, if possible, as quality will be better.	
Q6	Most of the figures and tables were set after References section. Please confirm layout if accepted.	

Q7	Please provide caption for Table 2.	
----	-------------------------------------	--

ELSEVIER

Many thanks for your assistance

^{*}In case artwork needs revision, guidance can be found at $\underline{\text{http://authors.elsevier.com/artwork}}$.