through the needle used to localize the lesion.[3] To avoid problems with electrical burns, a number of precautions are taken. First, jewelry is removed if possible. Second, the dispersive plate is placed at a site distant from the surgical field. Third, electrocautery is not used if the jewelry is close to the site of surgery. Another option is the use of a bipolar electrosurgical unit, which uses less power because current passes only between the tips of the unit (and not from the tip of the monopolar unit, through the body, to the dispersive pad).[1,2] It is also important to remember that newer electrosurgical units have isolated electrosurgical generators that limit the risk of alternate site burns. The current is isolated from the ground—it will not usually function unless the current returning to the unit by means of the dispersive unit equals the amount leaving the source.[2]

This leaves us with the more important question. Is elective surgery cancelled in a patient who wears oral jewelry? Other than issues related to electrical safety, we share similar concerns as cited by Dr. Rosenberg and his colleagues regarding risks of oral/dental trauma, aspiration, failure to secure the airway, and others. In the patient reported by Dr. Rosenberg's group, the patient has a tongue ring that is quite long, allowing greater movement in the mouth. There is probably even greater danger of oral and dental trauma with this type of jewelry. If the tongue ring has been placed recently, it may not be acceptable to the patient to remove it for the perioperative period. If the patient's jewelry has been in place for a while, it might be possible to remove the piece and replace it with a nontraumatic sterile stent (such as a loop of suture) before the induction of anesthesia. Anesthesia may or may not impose additional risks for the patient who has chosen to wear oral jewelry if the patient has been functioning with the jewelry in place for a considerable time, going about his or her activities of daily living. We will continue to evaluate these issues on a case-by-case basis and would not necessarily cancel an elective case simply because oral jewelry is present. Finally, as we mentioned in our previous letter, we anticipate additional reports of problems and issues with body art and anesthesia in the future.

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## References

1. Ehrenwerth J: Electrical safety, Clinical Anesthesia. 3rd edition. Edited by Barash PG, Cullen BF, Stoelting RK. Philadelphia, Lippincott-Raven Publishers, 1996, pp 137–559
2. Knickerbocker GG, Neufeld GR: Electrotrauma in the operating room: Shock, electrocution, and burns, Complications in Anesthesiology. 2nd edition. Edited by Gravenstein N, Kirby RR. Philadelphia, Lippincott-Raven Publishers, 1996, pp 79–91
3. Rappaport W, Thompson S, Wong R, Leong S, Villar H: Complications associated with needle localization biopsy of the breast. Surg Gynecol Obstet 1991; 172:303–6

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# Oral Etomidate

*To the Editor:*—I read with interest the article published by Streisand *et al.*[1] described as the first study in humans of oral transmucosal etomidate. They developed a solid dosage form of etomidate for oral transmucosal administration in humans. All adult male volunteers received unflavored lozenges in four different strengths: 12.5, 25, 50, and 100 mg. The authors found that drowsiness and light sleep occurred in a dose-related manner 10–20 min after administration and lasted for 30–60 min. They also suggested that some etomidate was absorbed through the buccal mucosa, although they could not discard the gastrointestinal route. I am happy that their results were also in agreement with our results,[2] where we administered 1.3 mg/kg etomidate to children as a premedication. Because we used the liquid formulation (10 mg/ml), we set our population between 10–15 kg. We observed that 1.3 mg/kg oral etomidate was as effective as oral 0.5 mg/kg midazolam for handling children with the benefit of faster discharge. The dose we used (1.3 mg/kg) seems to be in accordance with the highest dose used by Streisand *et al.*,[1] if we consider that an average healthy male adult weighs approximately 75 kg (≈1.4 mg/kg). We agree that oral etomidate can be an alternative, although we also observed that the children did not enjoy the taste, and we also contacted the company, asking for them to prepare a more concentrated solution with a nicer taste for oral administration.

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## References

1. Streisand JB, Jaarsma RL, Gray MA, Badger MJ, Maland L, Nordbrock E, Stanley TH: Oral transmucosal etomidate in volunteers. ANESTHESIOLOGY 1998; 88:89–95
2. Lauretti GR, Garcia LV, Reis MP: Comparison between oral etomidate administration *versus* oral midazolam as a premedicant for pediatric day case anesthesia. ANESTHESIOLOGY 1995; 83:A1135

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