Malpractice Minute

December 2010

Patient Death Occurs Subsequent to Swallowed Dental Tool

Mario Catalano, DDS, MAGD, FACP

In this case of unintended ingestion of an implant hex tool, the patient's care was complicated by the fact that a hospital emergency room failed to consult with her dentist before deciding to undertake a complicated procedure.

Mrs. Jones presented to Dr. Smith for treatment of peri-implantitis secondary to four implants supporting a mandibular overdenture. She had been a patient of this dental practice for over 20 years, although Dr. Smith had only recently purchased this general dental practice and was meeting her for the first time. Mrs. Jones had a history of dysphagia and had undergone swallowing therapy and periodic esophageal dilation, but she did not tell Dr. Smith of this condition.

Upon examining Mrs. Jones, Dr. Smith decided to remove the abutments in an effort to evaluate the implants and treat the inflammation. As he had not placed the implants or fabricated the appliance, this would enable him to evaluate the problem more thoroughly.

In the course of removing one of the abutments, the wet instrument, which was approximately four cm long, slipped out of Dr. Smith's grasp, fell to the rear of the patient's mouth and disappeared down her throat. Immediately concerned that Mrs. Jones might have aspirated the instrument, Dr. Smith sent her to a nearby hospital.

At the hospital, radiographic exam revealed that the hex tool was located in Mrs. Jones' stomach. A gastroenterology consultation was requested and, based on the instrument's sharp-looking appearance, the consulting
physician offered to remove the device. The patient's informed consent did explain perforation of the esophagus as a risk associated with the procedure. Subsequently, the instrument was removed.

Because Mrs. Jones had a narrow esophagus, the gastroenterologist was unable to use a sheath which might have been able to protect the walls of her esophagus. At the conclusion of the procedure, the gastroenterologist noted that he may have lacerated the esophagus. He immediately ordered a swallowing test which confirmed the perforation, and a surgeon was consulted. Mrs. Jones was taken to the operating room and the surgeon repaired the laceration. A few days later, Mrs. Jones was discharged with instructions to follow a pureed diet.

During the next few months, she underwent several additional medical procedures in an attempt to help her with her swallowing and increase her ability to eat more substantive foods. She seemed to be doing very well in her convalescence; however, her condition suddenly worsened, requiring hospitalizations for a minor stroke, atrial fibrillation, renal insufficiency, and then another stroke. Because of her loss of some motor function, a gastrostomy tube was placed so she could be fed.

About two weeks post-op, while having breakfast with her husband, Mrs. Jones complained that she was still hungry even though she had been tube fed. He made her a scrambled egg, fed it to her, and she appeared to aspirate it. She was rushed to the hospital, but expired shortly after arrival.

A lawsuit was commenced, naming the dentist, the hospital, and the gastroenterologist as defendants. Given the potential risk of a high dollar verdict, the defendants elected to settle the case out of court.

Dentists can use any of a number of clinical mechanisms to prevent this type of injury. Examples include:

1. Tie a piece of dental floss, too long for the patient to swallow, around or through the instrument before placing it in the mouth. This technique is also helpful in endodontic procedures that must be performed without the benefit of a rubber dam.

2. Maintain the patient in as upright a position as the procedure will allow, so that a dropped instrument will fall to the floor of the mouth rather than to the back of the throat. This would also be the preferential position for the placement of crowns on the posterior teeth, with special consideration given to maxillary second and third molars.
3. A throat pack of some sort could have been employed. This alternative is not as beneficial in that it could also lead to gagging, and the management of the tongue might become an issue but it is sometimes helpful in surgical situations.

**Conclusion:** This case study poses some interesting challenges, most of which could have been avoided if Dr. Smith had used a clinical mechanism to prevent his patient from swallowing the dental instrument.

*Names were changed to maintain the privacy of the dentist and patient involved.*

---

Please read the questions below and then email your responses to dentalstudents@medpro.com. The person(s) with the best answer to each question will receive a $20 gift card to the merchant of their choice and will be highlighted in the next issue of the *Malpractice Minute*.

A new patient has completed a medical history revealing that she has been taking an oral bisphosphonate for postmenopausal bone density treatment.

1. Aside from asking a patient to complete a periodic medical history update, what other things can a dentist do to prevent miscommunication about patients' current medical status?

2. What kind of policy and procedures should a dentist have to ensure that patients' medical histories are updated on a periodic basis?