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The Law and Dentoalveolar Complications: Trends and Controversies

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- Maxillofacial surgery • Standard of care • Informed consent
- Risk management

OVERVIEW

Despite appropriate planning, execution, and follow-up, patients can and do experience complications from oral and maxillofacial surgical procedures. The occurrence of a complication is often unpredictable, which is one of the reasons that oral and maxillofacial surgery is often described as much an art as a science.

However, the occurrence of postoperative complications in some situations can trigger claims of substandard care. This article reviews the legal standards associated with complications, provides case studies, and makes recommendations to avoid such claims.

LEGAL PRINCIPLES

A review of the legal principles associated with claims of malpractice in oral surgery is essential to understanding the legal issues associated with complications.

With few exceptions, oral surgery malpractice laws are determined by the individual state in which the surgery is performed. The inherent limits of space in this article as well as their purpose, prevent the listing of the specific laws of all 50 states, Washington, DC, and the territory of Puerto Rico. General references can be found on the Internet (see <http://www.mcandl.com/states.html>).

All states adhere to a few basic principles. An oral surgery malpractice claim requires the proof

of three basic elements of Tort Law: negligence, cause, and injury. Professional negligence is generally defined as failure to meet or adhere to the standard of care.

THE LAW AND THE STANDARD OF CARE

During the education and training of an oral and maxillofacial surgeon, the practitioner is taught standards of care for diagnosis and treatment. Thereafter, the oral surgery standard of care is set by the community of clinicians trained and licensed to perform oral and maxillofacial surgery. However, the legal standard of care can be broader and more dynamic. The law can create standards by legislation, rule, or regulation, regardless of the prevailing surgical standard of care. For example, one generally-accepted standard of care is to educate patients regarding a proposed treatment, such as IV sedation, and obtain the patient's consent, known as informed consent. That is a surgical standard of care. Risk management principles recommend the use of written documentation for most informed consents. However, in some states, such as California, by statute, all dentists must obtain written informed consent before performing IV sedation (California Business and Professions Code 1682e). The prudent practitioner, hoping to avoid being drawn into the legal system, should have an appreciation of the legal as well as the surgical standards of care and associated

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doctrines, and implement that knowledge in practice protocols.

Legal, rather than community, standards of care are determined by the written laws (statutes) of the state in which the dental professional practices and is licensed. For example, not all states require written informed consent for IV sedation. Until recently, not all states required a permit for IV sedation. However, these laws are seldom specific to any method of diagnosis, plan, or required treatment. Rather, the laws are general with regard to the definition of the community legal standards of care. In addition, there are Federal laws that can affect the practice of surgery, such as the Health Insurance Portability and Accountability Act (HIPAA) and the Occupational Safety and Health Act (OSHA).^{1,2}

The law defines the community standard of care as follows: "A surgeon is negligent if he/she fails to exercise the level of skill, knowledge, and care in diagnosis and treatment that other reasonably careful surgeons would possess and use in the same or similar circumstances. This level of skill, knowledge and care is generally referred to as 'the standard of care'."³ The legal standard of care is not limited to the very best care or to treatment by only the best surgeon. Nor is it the average care in the community. It is that minimum level of care to which a patient is entitled, as described in testimony by expert witnesses.

Failure to provide treatment that meets the standard of care is considered professional negligence or what is commonly referred to as malpractice. To prevail in a malpractice claim, the patient must prove four elements: (1) that the surgeon owed a duty to the patient; (2) that the surgeon failed to meet the legal standard of care; (3) that the failure was the legal cause; and (4) an injury. Only after proving these four elements can a jury or court award damages (money) to a patient.⁴

Attorneys cannot, and therefore do not, determine the standard of care. The community standard of care is determined by the opinion of expert witnesses testifying in court or before an administrative law judge in a dental board accusation. The standard of care against which the acts of a surgeon are to be measured is a matter peculiarly within the knowledge of experts. It presents the basic issue in a malpractice action and can only be proved by their expert testimony, unless the conduct required by the particular circumstances is within the common knowledge of the layman.⁵ For example, as to the standard of care to be applied to a claim of anesthesia injury, expert testimony is required because of the complexity of the issues. By comparison, in a claim alleging extraction of the wrong tooth, expert witness

testimony would not be required as to issues of the standard of care, but would still be required as to the issues associated with the appropriate method and costs to replace the wrongfully-removed tooth.

In a malpractice suit, a jury of mostly lay persons determines whether or not a surgeon violated the standard of care by comparing and contrasting the evidence provided by each side (plaintiff vs defendant) in a trial. They hear testimony from expert witnesses and view radiographs and records.

The legal qualifications for an expert witness include being licensed to perform the treatment in question or having expertise in one of the issues in dispute, such as standards of care for implants or the cause of a particular injury (eg, a postoperative infection). An expert may be a general practitioner or a specialist in the area of the treatment in question. The law in most states does not require an expert to have the identical training or certification of the defendant, although Arizona requires matching certification. While not common, a general dentist can testify against a board-certified specialist or vice versa in most states but with little credibility. Courts typically rule that credentials and board certification merely support the credibility of an expert and that the jury or judge may weigh in determining whom to believe. Juries may evaluate expert witnesses on their style or mannerisms, in addition to whether their statements seem to be supported by the other evidence in the case, such as imaging, records, or published studies.

Juries may discount the testimony of board-certified dental specialists who are also professors and authors in favor of a general dentist who testifies in a simple, logical fashion and renders easy-to-understand opinions that make common sense and are supported by the evidence. Therefore, maintaining clear and reasonably detailed records regarding oral and maxillofacial care is essential in avoiding claims of substandard care. An expert witness may also testify on issues of causation without having to render opinion as to the standard of care or without even having had training in surgery. For example, in cases of bacterial endocarditis, the law will allow testimony from an expert in heart valves or postoperative infections, such as a cardiologist or an infectious disease physician.

Expert witnesses typically come from two sources: treating surgeons and retained experts.⁶ Often they are subsequent care providers who have expressed some criticisms of the care given by another surgeon or attributed the cause of some injury to prior dental care or the lack thereof (ie, failure to diagnose postoperative fracture).

Such experts are called nonretained expert witnesses.⁷ Other expert witnesses are those who may not have seen the patient for treatment but are hired by the attorney for either the plaintiff or the defendant to evaluate the standard of care and/or causation by reviewing records, imaging, testimony, and sometimes by examining the patient. Such experts are called retained expert witnesses.⁸ Whereas, nonretained experts are only paid for the time spent giving testimony, retained experts are typically paid for the time spent reviewing the evidence in the case in addition to time spent in testimony. The practical reality is that each party to a malpractice suit will hire experts with a proclivity to their side of the case: pro-patient versus pro-practitioner.

Although the law allows an expert to be both a treating health care provider and a retained expert witness, in some states it may be considered unethical and a conflict of interest.⁹ The conflict issue stems from the potential that a subsequent treating surgeon may provide a patient with a treatment plan, such as the placement of several implants, and then provide testimony that the plan was necessitated by the previous treatment of the defendant, because in the expert's opinion it was less than the standard of care. Such ethical violations, although admissible evidence in trial to challenge the credibility of the expert witness, are not per se a violation of a statute and, therefore, will not cause the court to exclude the witness.

Experts can also render opinion as to the management of dental auxiliaries, such as surgical assistants, and their impact on the surgeon's ability to perform within the standard of care. Examples include negligent transmission of referral information, failure to schedule follow-up appointments or recalls, failure to maintain OSHA standards, or failure to follow safety protocols in radiography. This rule of law is called *respondeat superior*, meaning that an employer surgeon or dental corporation is vicariously liable for the wrongful acts of its employees, committed when they were acting within the scope of their employment, even if they violated office rules or protocols. Equally well established is the principle that an employee's willful, malicious, or even criminal acts may be within the scope of employment for purposes of *respondeat superior*, even though the employer had not authorized the employee to commit crimes or intentional wrongful acts.¹⁰ For example, an employee charged with collections gets into a heated argument with a patient and pushes that person, who then falls backward over a chair and is seriously injured. The employer is liable for that injury because the employee was performing, albeit poorly, within the scope of his/her job duties in

trying to collect overdue funds. The prudent practitioner should establish protocols to promote staff compliance with standards of care and conduct routine audits to evaluate compliance. Use of specific checklists for various tasks is helpful for training and auditing staff.

WRITTEN STANDARDS OF CARE

Expert witnesses may bolster their opinions by the use of authoritative or well-recognized texts, peer-reviewed journals, or treatises. However, whether a text is considered authoritative or well-recognized is determined by a judge, who considers expert witness testimony as to the qualifications of the text or journal on an issue before it can be read to a jury.¹⁰ Guidelines, such as those of the American Heart Association, are documents that also may be considered evidence of the standard of care.¹¹

Written guidelines can be used as a standard of care if they were so intended by the authors. The guidelines of the American Society of Anesthesiologists (ASA) were intended to set standards of care to reduce morbidity and mortality.¹² These guidelines are part of the typical oral and maxillofacial residency program. Also, the ASA guidelines may be admitted in most courts as evidence of standards of care for anesthesia. Therefore, most surgeons providing anesthesia follow those guidelines. For example, failure to rate a patient as ASA 1 to 4 may be evidence of substandard care in the event of an anesthesia complication.

On the other hand, the parameters of care of the American Society of Oral & Maxillofacial Surgeons are specifically meant not to be standards of care; however, some courts have allowed their admission as evidence.¹³

Surgical technologies, such as dental implants, come with manufacturer's guidelines. Although not specifically stated or intended as setting standards of care, courts commonly allow experts to testify that a defendant's failure to adhere to the manufacturer's guidelines, such as the specific use of a pilot drill, was a violation of the standard of care.

WRITTEN LAWS: CODE

In most states, the violation of a statute that is designed and intended to prevent harm (such as failure to autoclave surgical instruments) is presumptive evidence of a violation of the standard of care or professional negligence, and, in such cases, expert testimony is not required. A typical case might be the failure to adhere to OSHA regulations for the management of potential blood-borne pathogens. For example, should

a patient develop a postsurgical infection, ordinarily a known risk of any surgery, evidence of an OSHA blood-borne pathogens standards violation would be considered evidence of substandard care, and the defendant's only defense would be to prove the lack of a causation of the infection by the OSHA violation. In such a case, expert testimony would not be required on the issue of a breach of the standard of care. However, expert testimony may still be required as to causation; ie, did the statutory violation cause the infection?

DAMAGES

In the event of the finding by a jury or court of a breach of the standard of care that caused an injury, the patient can recover two types of damages: general and special. General damages are for physical and emotional pain and suffering. Special damages are for financial losses, such as medical bills, wages, and traveling expenses. Therefore, it is important to note and chart the details and specifics of a patient's postsurgical complaints and track their course. For example, when a patient suffers from residual numbness after an extraction or implant placement, the course of the injury and, therefore, damages should be charted with specifics and details at subsequent examinations.¹⁴ In addition, risk management dictates that postsurgical examinations should also include notation of the absence of neurologic or other complications. That way, if the patient should develop subsequent symptoms, the cause can be better understood or the patient's credibility challenged. In the case of numbness after an extraction or placement of an implant, the onset and degree of numbness may indicate the cause and even effect of whether or not a claim for malpractice is made.

COMPARATIVE FAULT/CONTRIBUTORY NEGLIGENCE

The law of negligence provides that if a patient is also negligent, such as failing to take antibiotics as instructed, his/her claim for malpractice may be reduced or even defeated. Most states follow the rule of comparative fault, meaning that the negligence of the patient merely reduces the amount of the damages that will be awarded by his/her percentage of fault.¹⁵ A few states follow the doctrine of contributory negligence, which means that if the patient is at fault to any degree, their claim for malpractice will be extinguished.¹⁶ Therefore, it is essential to note and chart whenever a patient misses an appointment, fails to follow instructions, or provides a false or deceptive history.

BURDEN OF PROOF

In a typical malpractice case, the patient's attorney has the burden of proving a violation of the standard of care, but unlike criminal cases where the evidentiary level is beyond a reasonable doubt, the plaintiff in a malpractice case need only provide evidence of a probability (not a certainty) of a breach of the standard of care. This is called a preponderance of the evidence. A probability in law means greater than 50%, meaning that a jury can have 49% doubt and still find that the defendant failed to meet the standard of care.¹⁷ Because of the reduced level of evidence required in a malpractice case compared with a criminal case, the surgeon should be vigilant in keeping records and documenting consultations with other health care providers as well as with the patient. It has been the trial experience of this author that in resolving conflicting testimony between a patient and a surgeon, juries favor the surgeon's testimony when it is supported by detailed and legible documentation.

As a cautionary note, records should be kept in the ordinary course of treatment and not amended in response to a patient filing a suit, complaint, or even a threat by the patient. Alteration of records may significantly damage a dental care provider's credibility and lead to a separate claim of alteration of evidence to deceive.¹⁸

INFORMED CONSENT

The laws of most states require that surgeons obtain informed consent before providing treatment.¹⁹ A surgeon is required to disclose all information relevant to a meaningful decision process and obtain the fully-informed consent of the patient or the patient's legal guardian before treatment. If imaging or models are used as part of the consent process, that fact should be charted and the object or educational tool identified. The laws are not specific as to the details that must be part of the informed consent discussion, and only require that the patient be told the significant risks, benefits, and alternatives to recommended treatments, therapies, or medications.

With a few exceptions (eg, IV sedation: California Code of Regulations, Section 1685), the law does not require that the informed consent be in writing. However, written documentation is a deterrent to claims of lack of informed consent. Studies have shown that patients do not recall pretreatment discussions, and they can insist with credibility that they were not warned.²⁰

INFORMED REFUSAL

Surgery has become more technical and complex, providing more treatment options for patients, and

resulting in new exposure potential. The obligation to obtain informed refusal or explaining the risks of declining a recommended treatment, therapy, or medication must be documented. When a patient refuses to accept recommended or ideal treatment or advice (eg, because of costs), the prudent surgeon should obtain and document informed refusal.²¹ This is known as documenting the discussion of the risks, benefits, and alternatives to refusing recommended treatment or selecting a less than ideal treatment plan.

A simple chart note can be effective documentation of an informed refusal discussion. For example, in a case where a patient is advised to have an impacted molar removed and, despite discussing the risks of not going forward, the patient declines, the following chart note can be made and then signed by the patient: “[Patient Name] advised of need to remove #16; Patient refuses. Risks, benefits, and alternatives discussed, including the potential for infection and injury to #15. Patient still declines. [X Patient Signature].” By having the patient read and sign a chart entry that notes that they were advised of the worst risks of refusal (in this case, infection) and still declined, the law assumes the patient would have declined had they been told of any lesser risks. In the case of electronic records, the patient can either sign a digital pad as used today for credit card purchases, or the form can be printed, signed, and scanned back to the e-file as a PDF file.

STANDARD OF CARE FOR REFERRALS

Another legal standard is the duty to refer for treatment. Although most often applied to general dentists, the standard also applies to specialists, such as oral and maxillofacial surgeons. Most state laws merely say that it is necessary to refer when it would be reasonable to do so without specific guidelines.

The following tenets are typically used by expert witnesses testifying for the plaintiff. Whether a patient can be treated or needs to be referred to another specialist is determined by whether the surgeon can: (1) predict the potential for complications and, therefore, be prepared for them (such as having resuscitation equipment at the ready and the experience to use it); (2) recognize the occurrence of a complication in timely fashion and initiate appropriate treatment (such as recognizing the absence of breath sounds and beginning basic life support); (3) recognize the occurrence of a complication and make a timely referral (such as calling 911 at the onset of respiratory failure).

DOCUMENTING MEDICAL CONSULTATIONS

The patient's medical history may indicate the need for medical clearance to perform oral and maxillofacial surgery. Ideally, the surgeon should obtain a signed clearance from the appropriate health care provider. However, there are occasions where only verbal clearance can be obtained.

Tips

Documentation of a telephonic medical clearance can be made by way of a confirming fax (**Figs. 1** and **2, Box 1**). In most states, courts recognize that confirming fax letters can be used as evidence of the terms of a conversation, if not denied by the recipient within 2 to 3 business days of transmission.²² Proof is obtained by sending the fax via a machine that will produce an activity report after each transmission. The report can be designed to include a copy of the transmission as well as the date, time, number, and indication of successful or failed transmission. This report, if successfully transmitted, should be added to the patient's chart and the original need not be mailed.

Complications

All surgical procedures have risks of complications that can and do occur, despite the best of care by the best of surgeons. As a general rule, a risk is a surgical complication that cannot be reduced or eliminated by skill, care, or technology. Skill refers to physical surgery and the use and control of instruments. Care refers to the diagnosis, planning, and follow-up of a patient, such as prescribing preoperative antibiotics. Technology refers to aids such as imaging, monitors, and testing. In contrast, when a complication results and there is a lack of skill, care, or failure to use technology, experts may testify that the complication is an injury caused by failure to meet the standard of care. The cases that follow are examples of complications with tips for avoidance of claims through practice management.

Extractions

Dental alveolar surgery typically comprises most of the procedures in an oral and maxillofacial surgery practice and is also the source of most of the claims of substandard care. Except for wrong site surgery, which is not a complication, most of these claims involve issues of whether the complication is a risk or the result of substandard care.

Nerve injuries, infections, and jaw fractures after dental alveolar surgery comprise many of the claims for malpractice, despite the fact that such

[Doctor's letterhead]

Date: _____ Fax No. _____

Dear Dr. _____: This fax will confirm our conversation of today wherein we discussed your patient, _____, and his/her condition(s) of

and our proposed treatment of

_____ with local anesthesia with epinephrine with without IV Sedation

scheduled for _____. In response, you recommended the

following:

Thank you for your advice in this matter. Please immediately advise us before the next business day if this letter is not accurate or if the patient's condition should significantly change before our scheduled treatment/operation as noted above. Otherwise, we will proceed as noted and will assume the foregoing is a correct statement of your advice.

[Doctor's Name]

THE DOCUMENT BEING FAXED IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED, AND IT MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW.

IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE AND RETURN THE ORIGINAL MESSAGE TO THE ABOVE ADDRESS VIA THE UNITED STATES POSTAL SERVICE.

Fig. 1. Confirmation letter for patient referral from another doctor.

complications can and do happen in the absence of negligence.

Nerve injuries

Postextraction nerve injury cases associated with extractions historically have involved both inferior alveolar nerves (IAN) and lingual nerves as well as claims of lack of informed consent and negligent surgery. Before the widespread use of detailed written consent forms in the late 1980s, the outcome of such cases turned on the credibility of the witnesses (ie, the patient vs the surgeon) as to what was or was not said. In cases where there was evidence of a signed consent form, the

surgeon more often prevailed because the injury was considered a risk of surgery. The result was a significant drop in cases involving nerve injuries. Currently, there are few claims involving injury to the IAN. However, in the mid-1990s, claims involving lingual nerve damage began to increase. The new tactic in these cases was to abandon the issue of informed consent and focus instead on a claim of negligent surgery. The plaintiffs retained surgeons to testify that, because the lingual nerve is outside the mandible, severance was the result of substandard surgery. Almost all the cases involved severe or complete numbness rather than merely reduced sensation.²² The testimony was that, although mild

[Doctor's letterhead]

Date: _____ Fax No. _____

Dear Dr. _____: This will introduce _____,

who is being referred to you for evaluation and/or treatment as you deem appropriate for his/her condition(s) or potential of

The following will be sent [by mail] [with patient]

This patient needs to be seen by _____ [DATE] _____. If you have not been able to see or appoint the patient by that date, please contact this office so that we may followup with the patient. Unless we hear to the contrary, this letter will confirm that you have agreed to see, treat or evaluate the patient as you deem necessary and appropriate.

[Doctor's Name]

THE DOCUMENT BEING FAXED IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED, AND IT MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW.

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Fig. 2. Introduction letter for patient referral to another doctor.

numbness could be caused by stretching, a needle, or bruising, significant or complete loss of sensation only could occur with partial or complete severance caused by either a drill bit or scalpel and, therefore, substandard care. In addition, many

cases of postoperative lingual anesthesia were followed by attempts at surgical repair and the operative findings were critical to the claim of severance. These factual scenarios resulted in some verdicts for patients.

Box 1
Instructions for sending confirming letters by fax to health care providers

The fax machine should be set to:

- Print transmission data on an individual setting, not every 20 messages or so
- Each print should include a copy of the letter (either full-size or reduced), and at the top show all of the transmission data from the sender to the receiver
- The data should include date, time, number dialed, time taken to transmit, and result: either OK (showing number of pages sent), NG (for no good), or Error

Tips Many of the nonnegligent reasons for lingual nerve injury have not been well documented. Adequate documentation has been essential to defending and preventing such claims. At surgery, chart any unusual findings such as the absence of a lingual plate, a tenacious follicular sac, or even the finding of what appears to be nerve tissue on the crest of the bony socket. Photograph any such findings. The surgeon should call all patients at risk for nerve damage the evening of the surgery and chart their responses to questions regarding neurologic status, positive or negative. If negative, that could be evidence that any subsequent numbness was not the result of surgery but due to infection and/or scarring. If the response is positive, the patient should be scheduled for an

examination using the neurologic examination form of the American Association of Oral and Maxillofacial Surgeons. Also consider photographing the site of the surgery and the areas of numbness. Based on accepted guidelines, consider recommendations or referral for early surgical repair and chart these discussions with the patient. In the event the clinical findings suggest that surgical repair may be beneficial and the patient declines the recommendation or referral, chart that informed refusal was obtained.

Jaw fractures

Patients are at risk for jaw fracture either during or after surgery. Most claims involve either failure to diagnose or late diagnosis with resulting injury claims of nerve damage or the need for surgical fracture fixation.

Tips Documentation is essential, beginning with the need for extraction. Clinical observations, such as periodontal pockets, pericoronitis, pain, or swelling should be recorded in addition to radiographic findings. At discharge, the absence of any evidence of fracture should be noted for patients at risk. Patients should also be given detailed written postoperative instructions, the issuance of which should be recorded, along with any video presentations viewed by the patient. Subsequently, reports of unusually persistent pain or bite problems not associated with typical postoperative swelling should be noted and the patient scheduled for examination and, depending upon the clinical presentation, radiographs taken. Chart any report of patient activities at the onset of symptoms, such as eating hard foods, playing sports, or trauma. If any referrals are made and the patient declines, obtain written informed refusal.

Infections

Although not common, postoperative infections have been the source of some claims of standard care, despite being a known risk and part of almost all written consent forms. The allegations typically are that the patient should have been given antibiotics either before or at discharge or that the surgeon ignored the patient's postoperative complaints and failed to diagnose and treat the infection in timely fashion, such that the patient suffered a more severe infection and/or required surgical intervention.²³ Sinus communications are at risk with extractions of upper molars and occasionally become the subject of claims due to late diagnosis.

Tips Document the clinical and radiographic findings that support the need for the extractions and whether preoperative or prophylactic antibiotics are indicated. If antibiotics are clinically

indicated and are offered and declined by the patient, chart informed refusal. At postoperative encounters, if a patient reports unusual persistent pain or swelling, consider an earlier postoperative examination. On examination, if upper teeth were involved, chart the lack of oroantral communications in patients at risk. Record subsequent return postoperative examination findings, including the patient's vital signs, even if normal, and any findings of lack of patient compliance with home care. It is particularly important to remain in close communication with such a patient to provide appropriate care and advice. Often claims originate because a patient cannot reach the surgeon or calls are not returned and the patient goes to another physician or emergency department, where more aggressive care is provided than would be indicated in the office of an experienced oral and maxillofacial surgeon.

Implants

One way to understand the claims issues with implant complications is to consider that they are really reverse extractions and, therefore, carry the same risks. The primary difference is that with extractions, the surgeon has no control over the location of the teeth and the surrounding structures. Whereas, with implants, the surgeon controls the placement of the implant relative to surrounding structures. Although the risks may be similar, the claims have been that the surgeon could or should have altered the location of the implant to reduce or eliminate the risk of complications. Most of the claims that have resulted in verdicts in favor of the plaintiffs have been associated with nerve injuries, particularly chronic severe pain alleged to be due to partial nerve damage rather than severance.²⁴

Tips As with extractions, patient candidacy and the indications for implants should be charted. If adjunct procedures such as grafting or lifts are also indicated, and if a patient declines such recommendation, the informed refusal, including the risks of having no implant or the risks of an implant without a graft or sinus lift, should be documented.

Cone beam computed tomography (CBCT)

Claims have been made by experts for plaintiffs that the use of additional imaging such as cone beam computed tomography (CBCT) could have prevented such an injury. The experience of this author has been that imaging does not replace surgical judgment. Whether or not CBCT is a standard of care is subject to significant controversy, including the issue of excess or needless radiation exposure. For years, surgeons have successfully placed implants without the use of CBCT scans.

Computed tomography is not new technology and has been available to surgeons for many years. CBCT has reduced the size and costs of CT scanners, the amount of radiation, and the area of exposure. However, in this author's experience, most failures were either due to the patient's reaction to surgery (a risk) or poor judgment by the surgeon, rather than an imaging issue. CBCT is not a substitute for careful planning by the surgeon.

Tips The need for and the contribution of CBCT in implant placement should be evaluated by surgeons on a case-by-case basis. There is no rule of law that CBCT is the standard of care for all implant cases, particularly considering the additional costs and radiation exposure compared with panoramic films. However, if offered to a patient and declined, informed refusal should be obtained, charted, and signed by the patient. At surgery and postsurgery, surgeons are advised to follow the same protocols for documenting and evaluation as noted in the previous extraction comments. The primary difference is that implants can be removed and, in some cases, early removal can reduce or resolve neurologic symptoms. The surgeon is advised to document the clinical findings and the options given to the patient, such as implant removal and, if the patient declines, to document informed refusal. Clinical judgment will determine whether to remove the implant and let the area resolve or to immediately place a shorter implant. However, experts for plaintiffs have testified that, if the shorter implant would work, why was it not chosen in the first place to minimize the potential for injury. Therefore, document why a particular length of implant was chosen.

Sinus infections

Sinus infections are a risk of surgery with extractions and/or implant placement and/or sinus lifts. Most cases with good consent documentation do not result in claims. However, failure to diagnose and treat such infections in timely fashion can cause claims for malpractice.

Tips Close follow-up after surgery continues to be a good risk management tool, including the recording of the absence of problems or complaints at each encounter. The lack of documentation allows patients to claim that their complaints were ignored. If there are complaints suggestive of infection or sinus opening, a clinical examination should be performed and charted in detail, including the absence of any findings. Photos and vital signs are also recommended as evidence of the examination. Where indicated, consider imaging and/or referral to another specialist such as an otolaryngologist. If the patient declines or fails to follow the

recommendation, obtain and chart informed refusal or the patient's lack of cooperation.

Grafts

Grafts have the same risks as extractions and implants, and it is recommended that the same protocols be followed for these surgeries as would be applied to extraction and implant complications.

Orthognathic procedures

With the drop in the number of orthognathic procedures being performed, the number of claims associated with such procedures also has dropped. However, such claims when they do occur, most often are associated with the lack of informed consent or surgical failure.

Tips Because of the complexity of the surgery, any issues and any medical consultations in the patient's health history that could affect healing should be noted. Detailed specific procedure consent forms should be used and well documented. Doing so will reduce most claims. In the event of a surgical failure, close follow-up and documentation, including the lack of symptoms and problems, should be noted. In the event of clinical findings of surgical failure, evaluation for correction or follow-up should be discussed with the patient and appropriate imaging considered where indicated. If the patient should decline imaging or further surgery, written informed refusal should be obtained. In any event, detailed operative reports are good risk management tools. Also, if any unusual findings are seen during surgery, such as unexpected anatomic aberrance, consider documentation by photograph before, during, and/or after surgery, in addition to imaging.

SUMMARY

Risks are complications that can and do occur, despite the best of care by the best of surgeons and in the absence of negligence. However, claims of negligent planning, surgery, and postoperative care have been made due primarily to poor documentation and lack of supporting evidence, such as images and photographs. Proactive documentation that includes charting the absence of contraindications to surgery and the presence or lack of unusual surgery findings, close follow-up care to include early encounters (calls or visits), making referrals, and obtaining informed refusal can significantly reduce claims of substandard care.

REFERENCES

1. Health Insurance Portability and Accountability Act, 45 C.F.R., 160 et seq., 1996.

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