

Liabilities and Risks of Using Cone beam Computed Tomography



Bernard Friedland, BChD, MSc, JD^{a,*},
Dale A. Miles, BA, DDS, MS, FRCD(C)^{b,c}

KEYWORDS

- Cone beam CT • Standard of care • Medicolegal • Liability • Malpractice
- Licensing • Interpretation

KEY POINTS

- The use of cone beam computed tomography (CBCT) carries with it medicolegal risks of which the practitioner should be aware. These include licensing and malpractice liability concerns.
- A practitioner who intends to take and/or use CBCT scans should seek advice from his malpractice carrier before doing so.
- All scans should be read by someone competent to interpret them.
- Using the services of an out-of-state radiologist to read scans poses its own set of risks.
- Consultation with a malpractice carrier and dental boards is advisable in this situation.

INTRODUCTION

As technology such as cone beam computed tomography (CBCT) advances apace in dentistry, clinicians who embrace it should understand the potential liabilities and risks associated with the technology. However, the decision to use or not to use new technologies within a practice or on an individual patient should be based on clinical considerations, not on legal ones. Nevertheless, once a decision has been made, clinicians would be well advised to understand the legal implications of their decision and how they use or do not use the new technology. Although the preceding statements apply to all aspects of dentistry, in this article the focus is on CBCT. The reader should bear in mind that in the United States, laws vary from state to state. Thus, a dentist should always seek the advice of an attorney or malpractice carrier to ascertain the law in his or her own state.

^a Department of Oral Medicine, Infection and Immunity, Harvard School of Dental Medicine, 188 Longwood Avenue, Boston, MA 02115, USA; ^b University of Texas Dental School at San Antonio, San Antonio, TX, USA; ^c Cone Beam Radiographic Services, Fountain Hills, AZ, USA
* Corresponding author.

E-mail address: bernard_friedland@hms.harvard.edu

TO SCAN OR NOT TO SCAN: THE STANDARD OF CARE

Unlike drugs that must be approved by the Food and Drug Administration for specific indications before they can be put on the market,¹ the same is not true of devices such as CBCT machines. Although all radiographic equipment has to meet federal and state guidelines, it is generally not approved for a particular purpose or indication. For new techniques and technologies for which there are no “standards of care” or long-established or accepted guidelines for their appropriate use, the issue of when and how to use them can be quite problematic for clinicians. A standard of care can be mandated only by a legislature, a court, and a dental board. It is rare, although not unheard of, for the first two to do so. For a case in which a court mandated a standard of care for eye examinations, see *Helling v Carey*.²

Dental boards may create a standard of care through their regulations. For example, the Massachusetts Board of Registration in Dentistry specifies what the patient record shall contain.³ Such a regulation may set a standard of care. There is no private group or association, no matter how esteemed, that is recognized as having the legal authority to establish the standard of care. Neither is there any group that has the authority to mandate a formal process by which a new procedure becomes the standard of care. It is almost universally true that the standard of care is determined by what clinicians actually do in practice. By way of example, in Massachusetts the standard of care is determined by “the degree of care and skill of the average qualified practitioner.”⁴ In Washington State, the standard is determined by “a reasonably prudent practitioner.”⁵ It is thus up to the profession acting through individual practitioners to decide on the appropriate use of the technology. Professional groups, including speciality organizations, do, however, issue “guidelines for use” or “position papers” on new technologies to help clinicians understand accepted applications, although these do not have the force of law.

In practice, the use of CBCT may be driven in part by vendors of the equipment, who have a pecuniary interest in their sale and use. Although their interest is legitimate, it is not a legitimate interest for practitioners. At the present time, it can be stated that the use of CBCT is well accepted in implant planning (**Fig. 1**) and endodontics (**Fig. 2**), for each of which a position paper exists.^{6,7} The use of CBCT is also well accepted to evaluate impacted teeth. A patient with multiple impactions (**Fig. 3**) illustrates this application. CBCT’s use in the evaluation of complex orthodontic and orthognathic cases, such as patients with asymmetries and syndromes, is accepted.⁸ Indeed, medical CT was used in such patients long before CBCT became available. Parenthetically, it should be emphasized that to say that the use of CBCT is well accepted is not to imply that its use is mandatory in all or even most cases in any of the dental disciplines.

In the early stages of a new modality, in this case CBCT, a reasonable starting point for a clinician trying to decide when a scan is indicated would be to follow position statements that are endorsed by professional organizations, as well as to ascertain what other dentists in practice are doing. The latter can be done by asking colleagues, by attending conferences, and by reading reputable journals. Unfortunately, in the American system of jurisprudence, a practitioner is far more likely to be sued for not using technology as opposed to being sued for using it. Thus, the inclination to use new technologies, including CBCT, is driven in part by the fear of malpractice.⁹

Another indication that a procedure has become clinically accepted is when third-party payers decide to cover the cost of such care. In medicine, Medicare and Medicaid usually lead the way, with private payers often following their leads on whether to cover a procedure.^{10,11} Decisions by third parties, governmental or private,

Download English Version:

<https://daneshyari.com/en/article/3130685>

Download Persian Version:

<https://daneshyari.com/article/3130685>

[Daneshyari.com](https://daneshyari.com)