

# Clinical Judgment and Evidence Based Knowledge: A Prescription for Clinical Confidence

Clinical judgment is a central component of the practice of implant dentistry. It is part diagnosis, treatment planning, operative routine, postoperative management, and assessment of treatment both in the short- and long-term. Clinical judgment also generates information that may be shared with other clinicians through conversations, lectures or clinical case letters.

Dental implantology is a profession in which the clinician's knowledge, skills, and judgment are used in "the service of protecting and restoring human well-being."<sup>1</sup> Clinical judgment is the heart of dental teams' know-how and skill. It may well be "almost as important as the technical ability to carry out the procedure itself."<sup>2</sup> Judgment develops through continual practice, the totality of both good and bad experiences, the continual quest of knowledge (education), and endless critical analysis. Clinical judgment is important to daily practice yet the physician author of the book titled *How Doctors Think: Clinical Judgment and the Practice of Medicine* asks, "Why is it that it is so difficult to define clinical judgment, and why do we doctors squirm when we are forced to admit just how reliant we are on it?"<sup>3</sup> This is problematic for all of us, because as clinicians we should back up our clinical actions with science.

As the practice of medicine and dentistry has changed, so has the validity of clinical judgment. Many of us remember how we marveled at our mentors for the competency and creativity they demonstrated in making operative decisions. Many of our mentors were "pioneers" and were creating the "rules" of implant dentistry as they went through a day's work of restoring patients' oral cavities to a state of function. Their competency was often based more on "gut-decisions" than on science, because through no fault of their own, there was little science on which to depend. Nonetheless, as the profession made progress based on scientific findings, clinical judgment was regarded as a fallacious trait and looked upon as being "charlatan-like". Unfortunately, some have gone to an extreme and advise clinicians "to guard against any use of judgment."<sup>3</sup> Interestingly, the shame of personal judgment was not revealed by scientifically based systematic analyses, but rather on anecdotal examples of inexperience or errors made and caught after the fact.<sup>5,6</sup>

Clinicians can be wrong in their beliefs, expectations, or understanding of the clinical practice of implant dentistry.<sup>1</sup> As clinicians our judgment has to be more than *post hoc ergo propter hoc* (since event Y followed event X, event Y must have been caused by event X). This may be frequently true but when used as the only guide it will eventually become a "*post hoc fallacy*". Judgment alone will be in error on many occasions. The issue is that a clinician may not recognize factually wrong clinical judgment that has evolved solely from personal experiences. Therefore, clinical practice must be more than judgment, but rather judgment supported with evidence based knowledge.

Implant dentistry is a hybrid of applied sciences and artistry. As a discipline it has its own specific features, which are distinct from those of a natural or theoretical science.<sup>7,8</sup> Clinicians must be aware of the information that basic science and clinical research has revealed; however, research may be biased or in error just as personal judgment can be. The timeless article on evidence-based medicine does not evaluate judgment as a criterion.<sup>9</sup> The fallacy occurs when we base all clinical decisions on experience and being unaware of what others have found to be true. If a clinician's decisions are based on old information or information gained just from one's own dated experiences, the decisions will not be "state-of-the-art". Likewise, if clinicians are basing decisions solely on research evidence, patients may be at undo risk. Thus, clinical practice cannot be good if it based exclusively on (a) evidence based knowledge or (b) judgment; it must be a blending of both. The implant dentist must protect against errors by utilizing a composite of evidence based knowledge and judgment.

Kienle et al.<sup>1</sup> in the *Journal of Evaluation in Clinical Practice* provides the following advice: Clinicians must exercise and maintain the following criteria:

- Possess a self-critical attitude,
- Have a comprehensive and clear observational manner,
- Continue to assemble essential details that affect clinical practice,
- Analyze factors of misperception,
- Undergo reflective evaluation of personal judgment criteria,
- Communicate with colleagues, and
- Know the critically assessed peer-reviewed literature.

Clinical confidence when based on the above is justifiable.<sup>1</sup>

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