

What Is Evidence-Based Medicine...and Why Should I Care?

In this age of recertification examinations and government intervention in medicine, it seems that new jargon is invented every day. Evidence-based medicine (EBM) is one of the terms heard increasingly more often in continuing medical education. Evidence-based medicine aims to apply the best available evidence gained from the scientific method to clinical decision making.¹ At first glance this may seem irrelevant or even detrimental to cosmetic dermatology, and some reasons to avoid it may be:

- *I don't need studies to tell me what works.* We dermatologists are experts in cosmetic medicine, and understand the needs of our patients and the tools in our skill set. No study or dictum from a journal can be more important than years of experience and good clinical judgment.
- *Just because you can't photograph an improvement, doesn't mean it isn't there.* We are all tired of academics telling us that this or that laser doesn't work. If I can see the difference, and so can my patient, and my patient's spouse, why should we care what a randomized controlled study shows?
- *Evidence-based medicine is a fad, and I don't have time for it.* I don't need to spend hours learning the lingo and methods of EBM because it will soon be replaced by some other fashionable concept championed by academics, payers, and the government. It's hard to run my practice as it is, and now I'm supposed to do what else?

However, there is a contrary opinion and some evidence (pun intended!) to support it. In this view, EBM is good not only for its purveyors but also for cosmetic dermatologists and their patients. Here are some reasons:

- *It is always better with more information.* While we dermatologists are trained and experienced in caring for our patients, there is no harm in knowing more about what works, including what cosmetic correction looks

better or lasts longer, how to avoid adverse effects, and how to make a patient more comfortable during a procedure. Evidence-based medicine is about communicating information that may not be obvious or was previously suspected but now is shown to be true. This doesn't mean understanding the details of statistics, and reading every journal cover to cover. Just reading the conclusion paragraph of a good article from a good journal can reveal, in as little as a sentence, what new therapeutic tidbit was discovered.

- *More effective, safer, less expensive treatments make happier patients.* We learn to make our practice more profitable by listening to our patients, speaking with successful colleagues, learning from drug and device sales representatives, and using common sense. Evidence-based medicine is yet another way to obtain information to streamline the practice and make it as efficient and successful as possible.
- *Dermatologists are the leaders in skin care and cosmetic medicine, and we want to stay that way.* One thing that differentiates us from less experienced, less educated providers of cosmetic services is our superior scientific background and ability to critically analyze and digest the available information about procedures and medicines. With so many nonphysician providers and so many non-core physicians in the cosmetic dermatology space, we need to reinforce our efforts to stay above the fray by using the latest, most precise, most authoritative information to guide patient care.
- *The government is in the healthcare industry to stay, and they will penalize us if we ignore evidence or fail to amass it.* Look what happened to Accutane, and how much good evidence was needed to neutralize possibly suspect evidence and to keep a good drug from being completely withdrawn. While we may say that cosmetic dermatology is none of payers' business because no insurance covers it, the government can still restrict the use of cosmetic procedures that have not been shown to be effective, are believed to be dangerous, or about which not enough is known. The

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US Food and Drug Administration is becoming stricter in approving new devices through the 510(k) process and is increasingly demanding evidence of safety and efficacy. And trial lawyers can sue us over anything, even cosmetic procedures that were not done as they “should” have been.

- *Evidence-based medicine doesn't mean just complicated research findings; your expert opinion is EBM, too.* The reality is that there are not enough journals, researchers, money, or time to perform studies on everything relevant to cosmetic dermatology. Most of what we do in clinical practice will continue to be based on our best judgment, founded on years of experience and education. Importantly, this too is EBM, specifically “expert opinion,” or level 5 evidence. While other types of evidence (randomized control trials, meta-analyses of such trials, cohort studies, etc) may

be “higher” levels of evidence, this does not mean that expert opinion and case studies (your memory of a specific patient outcome, for instance) are not valuable. Often in dermatology, case studies and expert opinion are the best evidence available, and then the principles of EBM suggest that we should be guided by these.

So at the end of the day, in most clinical situations, our experience and expertise should continue to guide our practices.

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Reference

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