

# What We Know

In medicine, the answer to, “How do we know what we know?” seems deceptively simple: by use of the scientific method (ie, through careful observation and rigorous controlled studies). That assertion is largely true in medical dermatology, where new medicines are carefully studied in double-blind, placebo-controlled trials. However, fundamental surgical techniques, and by extension, cosmetic procedures, are often carefully followed with no critical analysis or study simply because they were taught by a respected teacher. Some of our most basic surgical principles have barely been studied, if at all.

The fundamentals of surgery that we learn in residency stay with us for a lifetime. For example, most of us were taught that for a simple excision, the width-to-length ratio should be 1:3 or even 1:4 to avoid permanent “dog ears.” In many cases this is clearly untrue. I first became aware of this when I began to refer repairs following Mohs excision to the chairman of plastic surgery at the university where I was employed. He consistently left dog ears from even simple facial primary closures. How could the chair of plastic surgery at a major university not know what every second-year dermatology resident knows: thou shalt not leave dog ears, as they are permanent and unsightly? It turns out that in some situations, dog ears will resolve with time. This is particularly true on the backs of the hands. Also, as a plastic surgeon, he was comfortable going back and adjusting the scar later if necessary. Although the procedure for performing an ellipse with primary closure seemed clear-cut when I learned it as a resident, experience demonstrated it is actually a bit more subtle and complex.

There are many other cherished surgical principles that turn out to be untrue, such as the idea that one should

never use lidocaine with epinephrine on distal sites such as the fingertip or nasal tip because the epinephrine is so incredibly vasoconstrictive the site will necrose. This is nonsense. Another example is that one should use non-absorbable rather than absorbable sutures for cuticular (outside) sutures because absorbable sutures produce too much inflammation and favor infection. Recently, someone actually studied this tenet, and it turns out there is no short-term or long-term benefit from using nonabsorbable versus absorbable sutures for cuticular sutures.

I wonder how many of our cosmetic principles are similarly based on some respected elder’s opinion rather

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than studies. Has injection technique with fillers really been studied in a scientific fashion, or do we rely on the anecdotal experience of “experts”? I realize that many surgical procedures do not lend themselves to double-blind, placebo-controlled trials the way a new drug does. Nonetheless, it is important for us to remain open-minded and skeptical about “facts” and “laws” in the realm of dermatologic surgery and cosmetic therapy.

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