Coring Needle Applications with Emphasis on Ellacor for Facial Treatment R. Rox Anderson MD. Harvard Medical School. Boston MA. USA

A decade ago, my laboratory developed full-thickness skin coring needles for the purpose of harvesting tissue for skin grafting. We found that thousands of skin cores could be removed without scarring, if the cores are each less than 0.5mm in diameter. This pattern of skin removal is similar to that of fractional ablative laser treatment. However, the healing response is different, because there is no thermal damage from skin coring needles. Fractional laser channels have stiff walls due to a cuff of residual thermal damage; the laser channels tend to fill in with new skin tissue. In contrast, coring needle channels tend to close mechanically, which decreases the area of skin by approximately the sum of the area of removed cores. Skin laxity is therefore reduced. A skin-coring device (Ellacor) was recently FDA-cleared in the US. Up to about 8% of skin can be removed from the mid- and lower face per treatment, under local anesthesia. Research and clinical results will be presented.