

The New Opportunities Offered by Robotic Surgery

The Trend for Non-Invasive Procedures

Hair restoration remains the most popular cosmetic procedure for men, and its popularity is growing in women. The methods by which hair is transplanted is also changing drastically as the demand for less invasive procedures has skyrocketed. Robotic hair restoration is the newest, least invasive method.

Traditional hair restoration involves harvesting a strip - basically, removing a part of the scalp in the back (and/or sides) with a scalpel, and transplanting the follicles into new areas. This procedure involves stitches or sutures, and leaves a linear scar. The recovery starts when the sutures are removed 7-10 days after the surgery, and patients report side effects at the donor site for a few months following the procedure.

The newer method is follicular unit extraction, in which a surgeon uses a microscope to remove the follicles and transplant them. This procedure requires special expertise of the surgeon, and tireless dedication to slow, highly detailed work. Perhaps this is one of the reasons FUE is not offered by every hair restoration surgeon out there.

The ARTAS Advantage

Robotic technology and guided imaging are the latest advances in diagnostic and surgical procedures, and they are gaining a strong foothold in the FUE market. The technique combines the benefits of the FUE and strip surgery with minimal invasiveness and maximal results.

ARTAS is the only technology of its type to be approved by the FDA, which reports no side effects as a result of the robotic procedure. The ARTAS cameras are able to detect the angle and direction of each follicle - something that the surgeon has had to do with a microscope. ARTAS uses complicated algorithms to calculate hair density and direction for the most natural-looking results. The surgeon supervises the work of the robotic technology to ensure that the results are optimal as well. The machine is faster than a surgeon, extracting more than 500 grafts an hour, while a surgeon can only do 200-300 by hand. What's more, the machine does not get tired, nor is it prone to human error: surgeons experience a transection rate of 20-30 percent, while the machine's accuracy rate is more than 95 percent.

What does this mean for the future of hair transplantation?

Two-thirds of men in the US will experience some hair loss by age 35. This male pattern baldness (also called androgenetic alopecia) will affect 85 percent of men by age 50. ARTAS is the simplest, most effective, FDA-approved treatment available on the market today.