DEVICES FOR NON-INVASIVE BODY REJUVENATION

Despite rising demand for tissue tightening in areas such as arms and legs, the ideal modality has not yet emerged for many off-face areas.

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Despite not receiving the emphasis that facial rejuvenation has received in recent years, minimally invasive body rejuvenation has seen a continued rise in demand in recent years. Compared to the explosion of injectables for facial rejuvenation, body rejuvenation has followed a less explosive trajectory during that time. Nevertheless, gradual advances in device-based approaches to body rejuvenation has kept interest high and potentially introduced new pathways for enhanced technologies and outcomes in coming years.

A BODY OF DIFFERENCES

Anatomically, the skin on and around the face is very different than the skin on the body. While this is a very important distinction, equally important is how the concerns of patients differ based upon the areas they wish to treat. In the realm of minimally invasive treatments, patients may arrive at a cosmetic practice with their primary concern being the face. This is mostly due to awareness. Patients are inundated with ads for toxins and to a lesser degree fillers. Beyond fat treatment procedures, however, there is much less exposure for body rejuvenation procedures. That’s because the common areas of treatment and their accompanying procedures have not changed dramatically.

Arguably the most common form of body rejuvenation is the treatment of brown spots. To some degree, advances in technology have changed the way brown spots are removed. Intense pulsed light (IPL) devices still maintain a strong role in this regard, as well as Q-switched devices. IPL devices are beneficial to use on the entire area initially, followed with a focused treatment of a Q-switched laser and then possibly also fractional treatment. Pulsed dye laser treatment will always have a role for off the face reduction of vascular lesions and dyschromias. The progression of these treatments can provide very good results.

While the quality of treatment has not changed drastically with these devices in recent years, one major factor that has changed is the duration of treatment and the ability to treat more area in less time. With non-ablative fractional technology, for example, the requirements for downtime are much less demanding, and thus we are able to treat more.

TONE AND TEXTURE

Another relatively recent development has been patient demand for procedures to improve tone and texture in arms and legs. Unfortunately, though, the ideal treatment is not yet available with current available technology. One of the reasons for that is that skin on arms and legs is very different than other areas of the body. Compared to facial skin, the skin on arms and legs can be more sensitive. Patients often want non-invasive solutions, but often these areas require aggressive intervention and since the skin is “underprivileged,” it is not conducive to aggressive treatment.

The most aggressive non-surgical modality for these areas is ablative fractional technology, which can be painful. Whereas IPL devices have been on the market for 15 years and evolved to accommodate faster procedures and more

BOTTOM LINE

Minimally invasive body rejuvenation is a growing area of demand. Though several devices offer modest benefit in certain areas, the ideal technology for delivering results that match patient expectations has not yet arrived on the market.
area treated, ablative technology is not as maneuverable, particularly in areas that often require extensive treatment. Thus, the challenges we encounter when treating these areas are more a matter of practicality than anything, at this time.

At this point, none of the technology available is designed to specifically restore lost elasticity. Tone and texture are the two things that patients often want to address when they present with concerns regarding their arms and legs, but elasticity in general has eluded our treatment. Many current devices can be used for elasticity with varying levels of success. However, greater success is often seen in areas where the skin is more manageable, such as the chest and elbows. The advances in fractional and IPL technology have made the treatment of these areas more feasible now than they were 10 years ago, if only for the speed of treatment. If these devices advance to the point where they can be used effectively on the arms and legs, we may see their continued application in these areas.

NEW AND FORTHCOMING INTERVENTIONS

Given the demand for tissue tightening in off-face areas, many newer and forthcoming devices are likely to focus on these types of treatment. Of the novel treatments beginning to emerge, the most promising has been the use of fillers for the hands. Many medspas now, in fact, offer rejuvenation packages for the hands that include vein treatments and fillers. However, fillers are not used anywhere beyond the hands when it comes to non-facial rejuvenation. There is some conjecture regarding the “vampire facelift,” or platelet derived plasma, for off-the-face applications, but its viability is still very much in question.

Another modality that’s generated some attention in recent years is ultrasound technology. Ultherapy (Ulthera) is primarily used in the neck and chin area, but it has also been explored in limited capacity for thigh-lifting and chest rejuvenation. Other devices have released body-specific add-ons to enhance treatment, such as the ePrime (Syneron/Candela) body tip for off the face. We have also used the Fractora (Invasix) and Infini (Lutronic) devices with promising results for off the face tightening. These are RF needle-based interventions. The Infini devices offer user selectable depth control and insulated needles that should allow for enhanced precision for off the face rejuvenation.

There are also a number of RF heating devices (Exilis, Forma, etc.) that gently heat the skin as the operator moves the handpiece across the surface. These have been improved with better temperature controls and ease of use. They often do provide mild off the face tissue tightening, but the results are very operator-dependent and vary greatly among anatomic areas and individual patients.

Finally, one device that’s shown promise in arm rejuvenation is the canula-based ThermiRF (ThermiAesthetics), which can also be used on the back. It has been shown to be arguably more effective than brachioplasty, however it is more of a semi-invasive procedure than other non-invasive device-based interventions. Nevertheless, despite stronger efficacy with a device such as ThermiRF, practical issues such as time of treatment can pose challenges.

While ultrasound and radiofrequency technology will continue to be explored in various off-face areas, it is difficult to predict whether any of these technologies will extrapolate to the body.

CONCLUSIONS: STILL NOT THERE

Although patients may arrive at our offices with the expectation that we can treat arms and legs—and elasticity in general—through non-invasive means, it is incumbent upon physicians to inform them that the ideal technology for this kind of treatment is not yet available. Thus, if any treatment is to be attempted with IPL or fractional technologies, it is important to set appropriate expectations for treatment and to convey to patients that results will be modest. While many of the available technologies are incredibly successful at treating certain areas, elasticity has proven elusive because the skin on the arms and legs varies tremendously. We will continue to see greater use of available technology in these areas regardless (particularly given the advances in duration of treatment), but until new research can show the potential of a given technology to convincingly tone and texture these areas, they will remain somewhat unpredictable as far as results.

TREATING LEG VEINS

In the area of leg veins, endovenous laser treatment and sclerotherapy remain the tried and true approaches. Many physicians focus on smaller veins (less than 2mm in size) because they are the most manageable with the available tools. Asclera (Merz Aesthetics) has been approved for several years now and is effective for sclerosing. Hypertonic saline is also favored by many physicians because it is relatively inexpensive and safe. In terms of external lasers, however, little has changed in 10 years. They are often painful for patients and thus have a very limited, niche role for leg vein therapy. While sclerotherapy would be preferable under most circumstances, external lasers can be helpful in a certain cases, such as spider veins.

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