

Targeting Gravity-Prone Laxity Zones with Monopolar RF

By *Lisette Hilton, Contributing Editor*

Both postpartum and aging patients frequently present with concerns regarding localized skin laxity in gravity-prone areas, particularly the lower abdomen and suprapatellar region. These anatomical regions are often characterized by progressive dermal atrophy, extracellular matrix degradation (particularly collagen and elastin) and attenuation of structural anchoring elements, such as fibrous septae and retinacula cutis. The result is visible sagging that resists improvement from conventional non-invasive modalities, like laser or high-intensity focused ultrasound (HIFU), according to Mariana Gradowski, MD, at the Gradowski Natural Beauty Clinic in São Paulo, Brazil.

Dr. Gradowski shared her experience evaluating the clinical efficacy and safety of Volnewmer, known in the U.S. as Everesse (Classys; Seoul, South Korea), a monopolar radiofrequency (RF) device, in a patient case involving the abdomen and another patient treated with the technology in the suprapatellar area.

“Both patients exhibited visible skin tightening and dermal remodeling with high tolerability and minimal downtime,” she shared. “These findings support the role of monopolar RF in effectively addressing skin laxity in body regions susceptible to gravitational descent.”

Monopolar RF technological advances allow for deeper, more uniform dermal heating

through volumetric energy delivery, leading to collagen denaturation and subsequent neocollagenesis.^{1,2} Volnewmer, according to Dr. Gradowski, is a next-generation monopolar RF system providing temperature-controlled volumetric heating.

“The treatment optimizes therapeutic safety and clinical efficacy in anatomically challenging body regions,” she commented.

Volnewmer Technology Highlights

Dr. Gradowski found that the technology delivers effective treatment at therapeutic temperatures with minimal patient discomfort. More specifically, by delivering 6.78 MHz of high-frequency monopolar RF energy, Volnewmer can penetrate more deeply into the dermis. This is as the device’s integration with its water-cooling system maintains epidermal protection and thermal comfort.

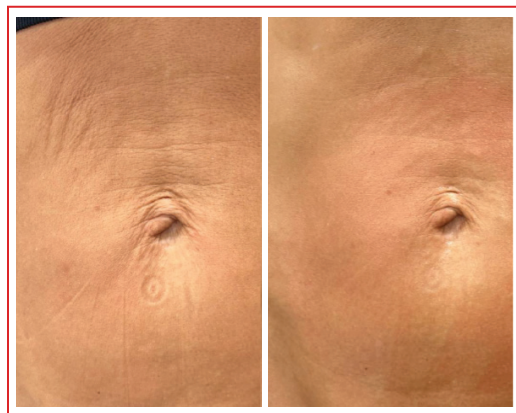
“Unlike bipolar systems, monopolar RF disperses energy from a single electrode through tissue toward a grounding pad, allowing greater depth and volumetric heating,” explained Dr. Gradowski. “Controlled dermal heating induces immediate collagen contraction and initiates remodeling processes, including fibroblast activation and ECM (extracellular matrix) reorganization.”³

Among its safety features, Volnewmer employs an integrated water-cooling system that allows the delivery of high RF energy in a controlled and gentle manner. The cooling mechanism ensures epidermal protection, maintains patient comfort and minimizes the risk of adverse effects, enabling a safe treatment even in sensitive or structurally delicate body areas, such as post-pregnancy abdomens or lax knees, according to Dr. Gradowski.

Small Sample, Big Potential

Although based on a small sample, images of Dr. Gradowski’s two cases illustrate the potential of monopolar RF to deliver consistent and safe improvements in skin laxity in challenging body areas.

Similar to what Zelickson et al. reported in a paper published decades ago,⁴ Dr. Gradowski



Before and after Volnewmer treatment postpartum abdominal laxity
Photos courtesy of Classys, Inc.



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found that Volnewmer achieved early and visible remodeling effects in the suprapatellar region, which due to its thin dermal structure and poor anchoring often resists tightening.

“Similarly, postpartum abdominal laxity, typically requiring multi-modal interventions, showed progressive improvements from a single session,” she added.

When asked about key clinical implications, Dr. Gradowski cited:

- Tolerability: No anesthesia required and minimal discomfort
- Safety: No adverse events or downtime
- Effectiveness: Results are evident from one month and sustained beyond five to six months
- Treatment efficiency: Single-session outcomes suggest a strong remodeling capacity

“Our results align with previous studies indicating monopolar RF’s deep tissue engagement and long-term dermal remodeling effects. Moreover, the minimal side effect profile makes it a favorable choice for patients avoiding surgery or aggressive resurfacing procedures,” she said.

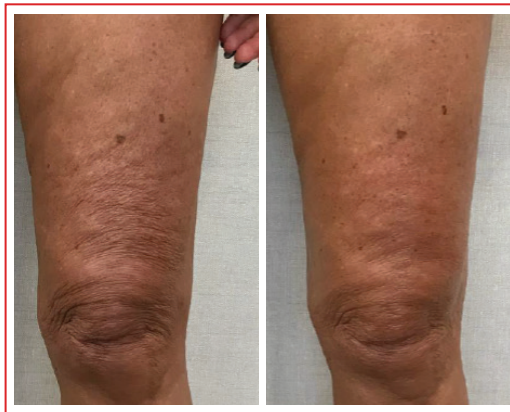
Mechanisms of Action in Body Rejuvenation

Volumetric monopolar RF promotes dermal remodeling by inducing thermal collagen denaturation, which results in immediate skin contraction. According to Dr. Gradowski, heat from the device stimulates fibroblasts, leading to neocollagenesis and elastin synthesis. Vascular remodeling enhances tissue oxygenation and nutrient delivery, while gradual ECM realignment increases dermal density and elasticity.

“Histologic studies have shown that RF heating of dermal and fibrous septae increases collagen types I and III for several months after treatment,”⁵ she stated. “In body applications, where dermal thickness and subcutaneous fat vary greatly from facial areas, precise depth control is critical. By combining deep energy delivery with an efficient cooling system, Volnewmer minimizes the risks of burns or undertreatment, particularly in bony or thin-skin areas like the knees.”

Clinical Recommendations

Volnewmer is particularly effective for treating mild to moderate laxity in postpartum



Before and after Volnewmer treatment of suprapatellar (knee) skin laxity

Photos courtesy of Classys, Inc.

abdomens, suprapatellar regions, flanks and inner thighs, Dr. Gradowski noted.

“It can also be applied to the décolleté with caution,” she added.

Volnewmer is effective as a standalone treatment, as a preparatory step before more invasive body contouring procedures or as a maintenance therapy following liposuction or skin excision.

“Given its short treatment time, high tolerability and consistent results, monopolar RF with Volnewmer should be regarded as a core modality in comprehensive body rejuvenation protocols,” Dr. Gradowski asserted. “Given the ease of treatment, short duration and high patient satisfaction, monopolar RF should be considered a foundational tool in any body rejuvenation portfolio.”

Future studies with larger sample sizes and histological analysis are warranted to further validate these findings and optimize treatment algorithms, according to Dr. Gradowski.

References:

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