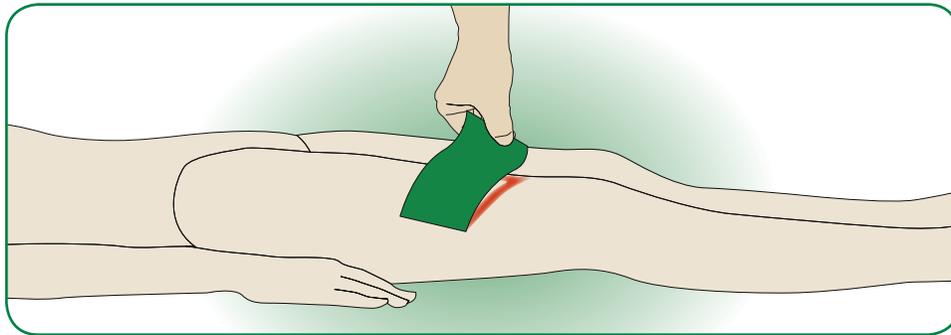


Patient Return Pads

Because of frequent patient burns at pad sites, the RECQM system was developed. The generator has a microprocessor that monitors the quantity and quality of contact (or impedance) the pad makes with the patient. Monitoring pads are easily identifiable. They have a split foil surface as opposed to a large single sheet of foil on the pad. *With the RECQM system, if pad contact is interrupted the generator will alarm and deactivate. This is becoming outdated with the rapid acceptance of Mega Soft technology.*



Although sticky adhesive patient return pads rarely cause pressure ulcers, the adhesives can contribute to skin problems that break down further during a patient's recovery period.



Patient Return Pads

Listed below is a table that helps with understanding the differences between the technologies related to patient return electrodes. Health care professionals need to be cognizant of these variables.

It may be beneficial to eliminate the use of single plate "sticky" pads except for those cases where it is the only technology available, such as neonatal procedures. For neonatal procedures, the largest size pad available should be used with the lowest possible power setting.

Mega Soft™ Reusable Patient Return Electrode

The ideal patient return pad is patient safe, cost effective, and diminishes the chance for patient pressure sores. The Mega Soft pad is filled with viscoelastic polymer and is available in single cord and dual cord configurations.



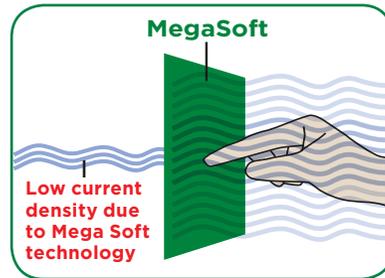
Two cords allow for one pad with two generators

Using a reusable, large patient return electrode containing viscoelastic polymer fill serves multiple critical functions. The primary function is the dispersement of electrosurgical energy and in addition, the polymer prevents pressure points, friction and shearing.

Patient Return Pads

The pad becomes the “Gatekeeper” of current flow.

Placing the patient in direct contact with the pad provides full advantage of the pressure reducing benefit while providing the same level of safety to that of monitoring pads. Should the contact area that the patient has with the pad decrease to a minimal level, the reusable patient return pad limits current flow from the patient to the pad. By limiting the current flow, the current density is kept sufficiently low to prevent heat build up under the pad.



Concern	Single Plate “Sticky” Pad	Split-Plate “Sticky” Pad	Mega Soft Technology
Pad site burn due to tenting, peeling, etc.	YES	SOMEWHAT	NO
Fluids Under Pad Effecting Adhesion of Pad to Patient	YES	YES	NO
Fluids Under Pad Affecting Health of Skin due to Prolonged Exposure	YES	YES	YES
Metal Implants	YES	YES	NO
Placement on a Good Muscular Vascular area void of hair, fat, bone	YES	YES	NO
Placement of Pad with various positioning devices (egg crate foam, gel pads, blankets, etc.)	NO	NO	YES
Alternate Current Pathways	YES	YES	YES
Touching/overlapping of multiple pads	YES	YES	NO
Denuding of skin upon pad removal	YES	YES	NO

Patient Return Pads

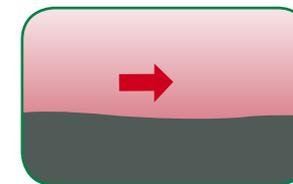
Mega Soft Economics

The fact that the pad helps reduce postoperative pressure sores and is reusable brings forth cost savings. The savings are realized not only per procedure because the pad can be disinfected and reused; but also, for those post operative patients who would have had the additional care costs related to pressure sores and ulcerations.

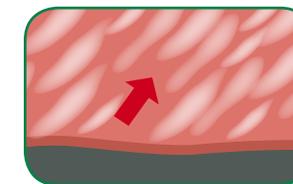
Pressure Sores and Decubitus Ulcers

Many factors contribute to the potential for pressure sores or decubitus ulcers and some of these factors begin during the patient’s surgical procedure. The patient’s position needed for the correct anatomical approach, the age and general health of the patient and the procedural length of time are all contributing factors. Actions that frequently occur during the positioning that lead to patient pressure sores include:

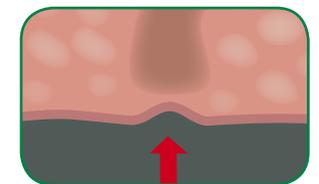
Friction



Shearing



Direct Pressure



Friction can occur when the patient’s skin is pulled or rubbed over a stationary object. Shearing occurs when the patient’s skin is fixed while the underlying tissue shifts or is moved without support to the skeletal system. Direct pressure or weight applied over time to specific areas causes an ischemic reaction in deep tissue. Damage occurs as the bone pushes against the muscle and ischemia extends outwardly to the soft tissue layers of the dermis. The tissue is deprived of blood and oxygen and eventually necrosis will result. Pressure can also result in nerve damage.