

How Prone Position Gel Pads Reduce Pressure Injuries in Operating Rooms

Surgical patients who require a long period of immobility are particularly at high risk of developing pressure injuries, commonly referred to as pressure ulcers, bedsores or pressure ulcers. This group of injuries is very common since patients who are on their stomach on the bed — commonly referred to as the prone position — exert more pressure on some body parts than others. One of the most crucial interventions toward solving this problem is through the administration of prone position gel pads. These medical grade pads which are specifically designed to support the physical body and minimize areas of pressure helps in reducing the possibilities of pressure injury in the operating room.

How Prone Position Gel Pads Work

[Prone position gel pads](#) are exclusive cushions that are made of superior silicon gel. These pads are located at or near regions of the body that experience more pressure such as the chest, hips, knees and head. Their main task is to help a pad to evenly distribute a patient's weight across the pad's surface area so that pressure is not focused on any one part of a patient's body. This balanced pressure helps to avoid skin damage and formation of pressure injuries.

The type of gel used in prone position gel pads is most preferred as a result of its flexibility that enhances the molding of the body. It gives more support and development so relieves strain on skin and the tissue support during longer surgery procedures.

Reducing Pressure Injuries with Prone Position Gel Pads

These pressure injuries are most likely to occur when surgeries take more than three hours. When the patient is in a prone position, the most weight bearing areas are the face, chest and knees. Prone position gel pads help to reduce these risks in several ways:

Pressure Redistribution: These gel pads spread out body mass to reduce pressure by distributing it across the surface area of their application. It also minimizes the risks of prolonged pressure which can cause tissue breakdown and pressure ulcers.

Improved Blood Circulation: Reduced blood flow to a given area is one of the activities that make formation of pressure injuries due to the effect of pressure that compresses the blood vessels. As prone position gel pads are soft and flexible they do not cause excessive compression of the tissues leading to improved blood supply and means that oxygen supply enhances to enable the maintenance of tissues.

Skin Protection: Silicon gel found in prone position gel pads results in the production of a smooth surface on the skin thus minimizing incident of friction and shear forces. These mechanical forces are capable of causing skin lesions and injuries that give way to pressure ulcers. Gel pads provide an insulating layer that keeps the skin from getting damaged.

The Role of Lateral Position Gel Pads and Silicon Gel Pads

Originally, prone position gel pads are important for surgeries that involve the prone position, though other gel pads such as [lateral position gel pads](#) and silicon gel pads are also crucial in preventing pressure injuries. Lateral position gel pads are specially made to be used by the patient's side since they mostly lie on their sides. In the same way as prone gel pads they help to shift the body weight and protect such areas as shoulders, hips and ankles.

Silicon gel pads in operations positions, in general, are very useful, and their usage can be extended to any position in surgery. Their capacity to be conformal to the body; their ability to be hypoallergenic and biocompatible means that decreased pressure related complications should be able to be reduced in all forms of surgeries.

Conclusion

Risk of pressure injuries is high in surgeries when patients are positioned in prone or lateral positions for hours. This lateral and prone position gel pad, besides the other [silicon gel pads](#) is a safe and effective method in reducing pressure injuries. When pressure is evenly distributed, circulation enhanced, and the skin safeguarded, these specially designed pads play an important role in the preservation of patient safety in the operating theater.