BIOMATRIX
PRODOTTI MEDICALI

Patient Positioning in Operating Theatre

by Dr. Valeria Lattuca

Facilitate **patient comfort** and **safety**
thanks to the correct use of positioning systems

Summary
Patient Positioning in Operating Theatre

by

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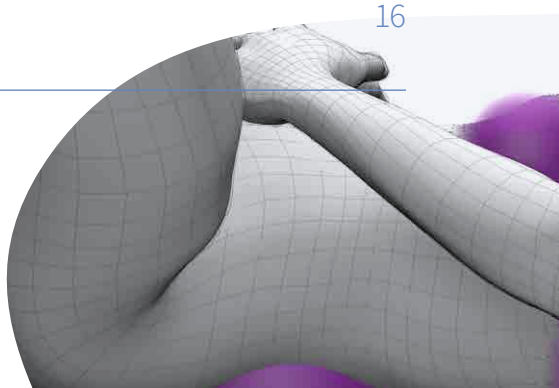
Wound specialist.



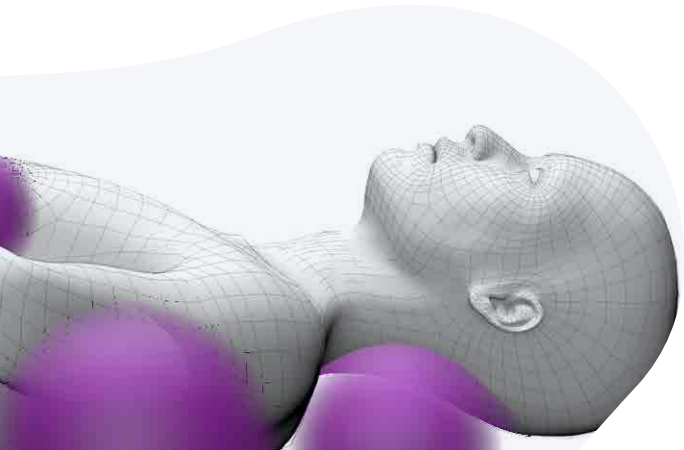
Foreword
Patient Positioning in Operating Theatre

01

Patients' Positioning on the surgery table is crucial for their safety, and for the safety of Multidisciplinary team assigned to the Operating Theater.

Correct exposure of the operating field is equivalent to a successful surgical intervention.

It is the surgeon who decides the most appropriate posture for the surgery. The patient will be positioned on the operating table according to the anatomical part to be reached, to the surgical technique to be performed and according to the tools used. The whole *team* will have to collaborate in the movements, the anesthetist will coordinate the positioning maneuvers and the control of the head.



1.0 Patient positioning on the operating table

1.1 Multidisciplinary team assigned to the operating room

according to the anatomical part to be reached

according to the surgical technique to be performed

based on the operating tools used

SURGEON
He/she decides the best posture for the surgery.

It is the Surgeon who decides the posture

ANESTHETIST
He/she coordinates patient positioning maneuvers, controls the head.

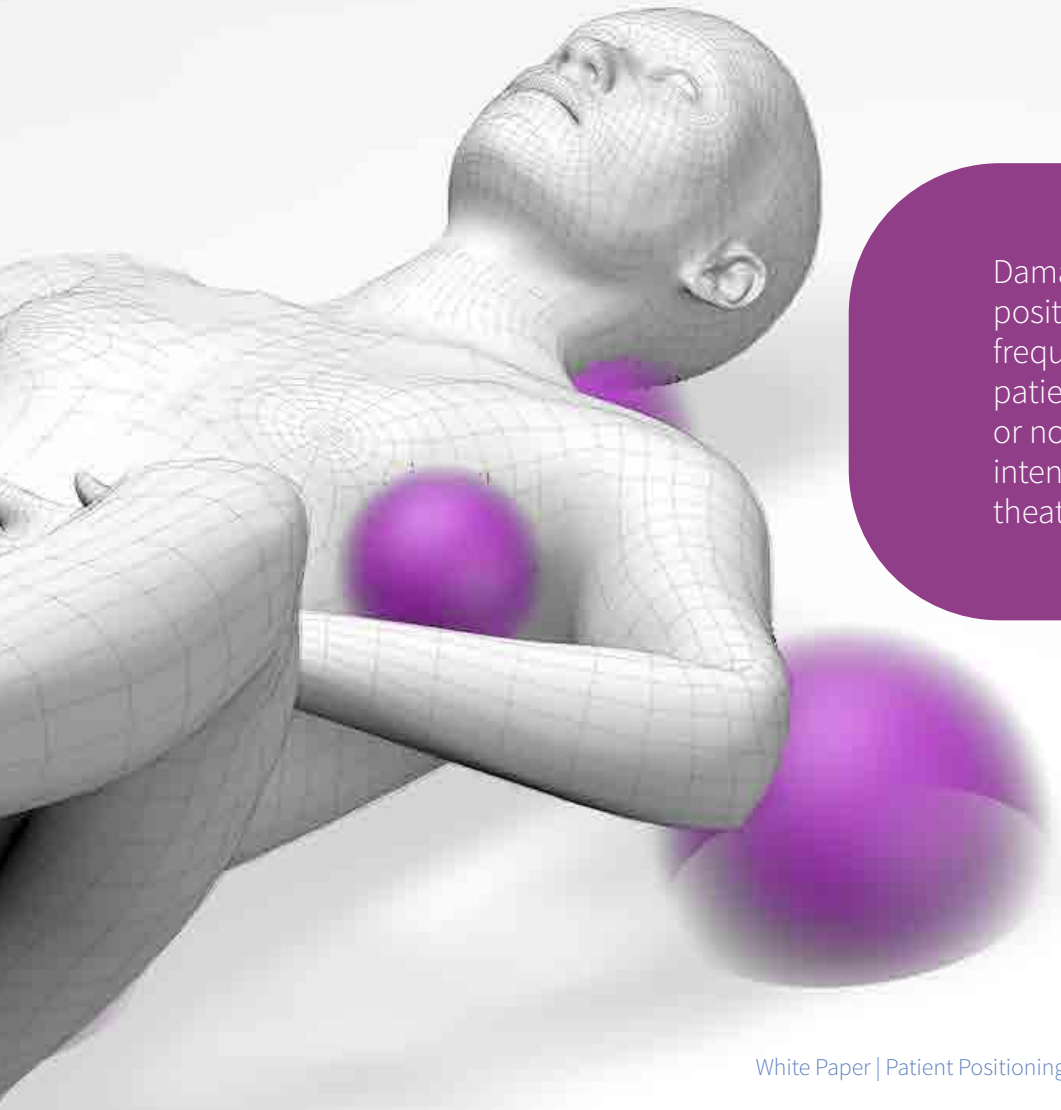
MULTIDISCIPLINARY TEAM
Cooperates to patient placement.

1.2 Safety

The postures must guarantee the patient maximum safety on breathing, on the blood circulation, on the risk of falls, on the prevention of Pressure Injuries, on any nerve compromises, muscle tendon and limit post-operative complications.

1.3 Comfort

The patient in the operating room does NOT feel pain and is unable to communicate the discomfort perceived during postural changes, and any pain caused by the final position that he will have to tolerate for hours.



Damage resulting from poor positioning occurs more frequently in wards where patients are less cooperative or not self-sufficient, such as intensive care and operating theaters.

1.4 Know the patient

Evaluate the patient through the medical record looking for any articular limit or any other limit.

Articular limits, or others

it is the surgeon's job to find the best position, which assures the utmost patient comfort and grants operation success.

Previous pathologies

It is the task of the multidisciplinary team to adjust the patient's position, considering any functional limitations related to previous pathologies (fractures, dislocations, etc.)

Presence of other surgical incisions or skin lesions

it is the surgeon's task to find a point from which to proceed with the operation, which does not compromise any previous operations.

Assess skin integrity before and after surgery.

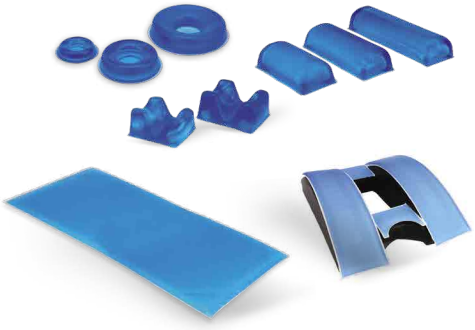
1.5 Devices for the operating theatre

Among Operating Theatre's devices, we find:

- Positioners, which include all those devices employed for the best patient positioning on the surgery table.
- Anti-decubitus surfaces, which means supports and devices to redistribute and/or relief pressure caused by the contact between the body and a surface.

POSITIONERS FOR THE OPERATING THEATRE

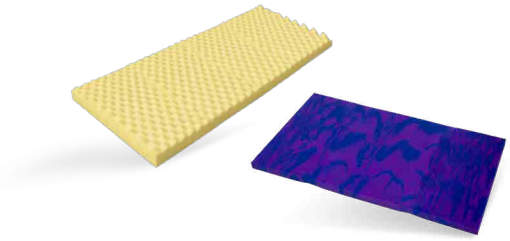
Operating Room Gel Pads



Reusable Polyurethane foam and with Skay fireproof cover Positioners

ANTI-DECUBITUS SURFACES AND DEVICES

Disposable antibedsore support surfaces

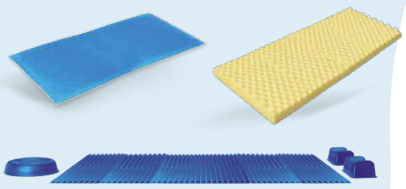


Single use positioners

2.0 Supine position

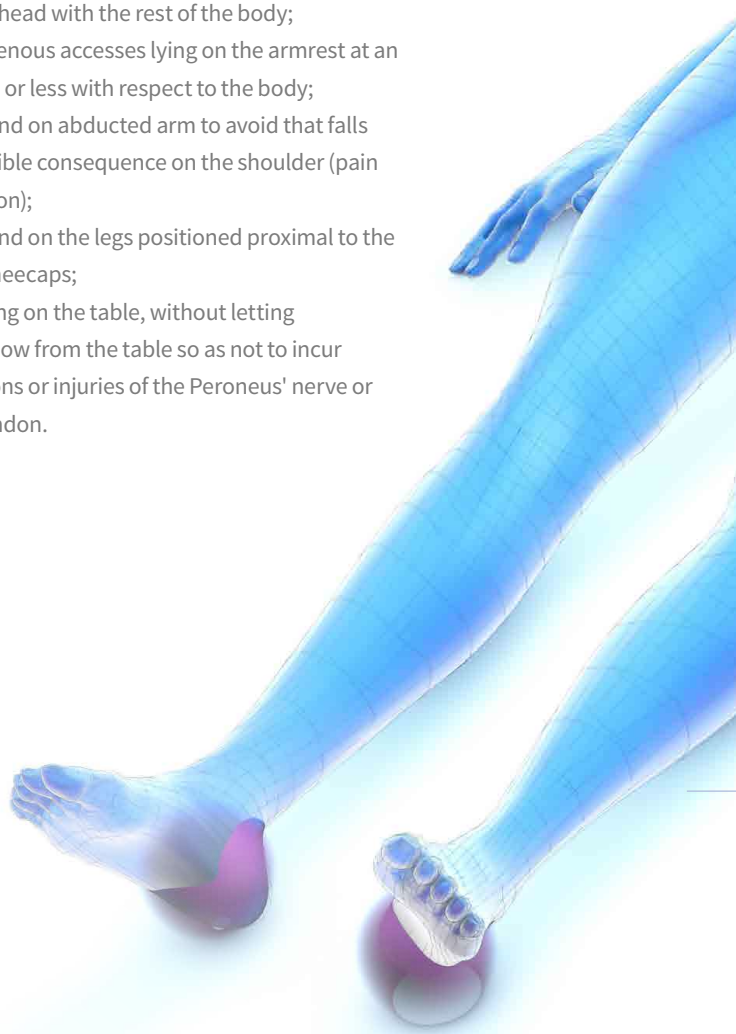
Support base

It is essential to use a comfortable support surface, which relieves pressure.



The Supine position gives access to almost all surgical area.

- 1. align the head with the rest of the body;
- 2. arm for venous accesses lying on the armrest at an angle of 90° or less with respect to the body;
- 3. safety band on abducted arm to avoid that falls with a possible consequence on the shoulder (pain or dislocation);
- 4. safety band on the legs positioned proximal to the patient's kneecaps;
- 5. feet resting on the table, without letting them overflow from the table so as not to incur compressions or injuries of the Peroneus' nerve or Achilles' tendon.



Head

The head must be locked.

Upper limb

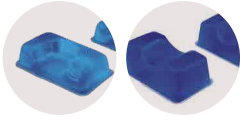
The arm must be turned upwards at 90° and put in supine position to allow venous access.

Sacral area

Place devices that support and relieve pressure during the operating phase.

Legs and feet

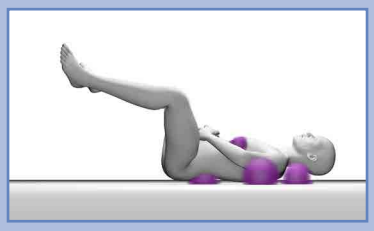
Do not let the feet drop off the table to avoid compressions or injuries of the Peroneus nerve or Achilles' tendon.



Thighs and knees

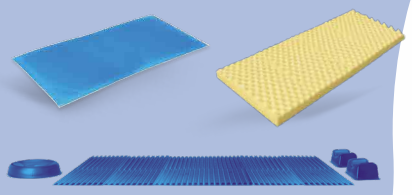
Position devices that support and relieve pressure during the operation.

3.0 Gynecological or lithotomy position



Support base

It is essential to use a comfortable support surface, which relieves pressure and avoids accidental patient slipping.



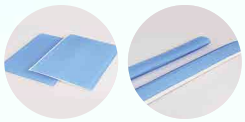
This position requires the intervention of two people to lift the lower limbs simultaneously. When the patient is awake, the collaboration of the patient could be requested, gradually obtaining the desired position.

- 1. apply a slight rotation of the femoral head on the pelvis to maintain the physiological structure of the joint;
- 2. place the lower limbs on the stirrups;
- 3. position the various devices to reduce the pressure on the contact points;
- 4. if a marked Trendelenburg is also required, it is good to apply counter-thrusts at shoulder level to prevent the patient from slipping.

The same care should be taken in returning to the primary position.

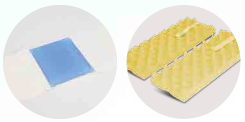
Lower limbs

Lower limbs are placed on stirrups.



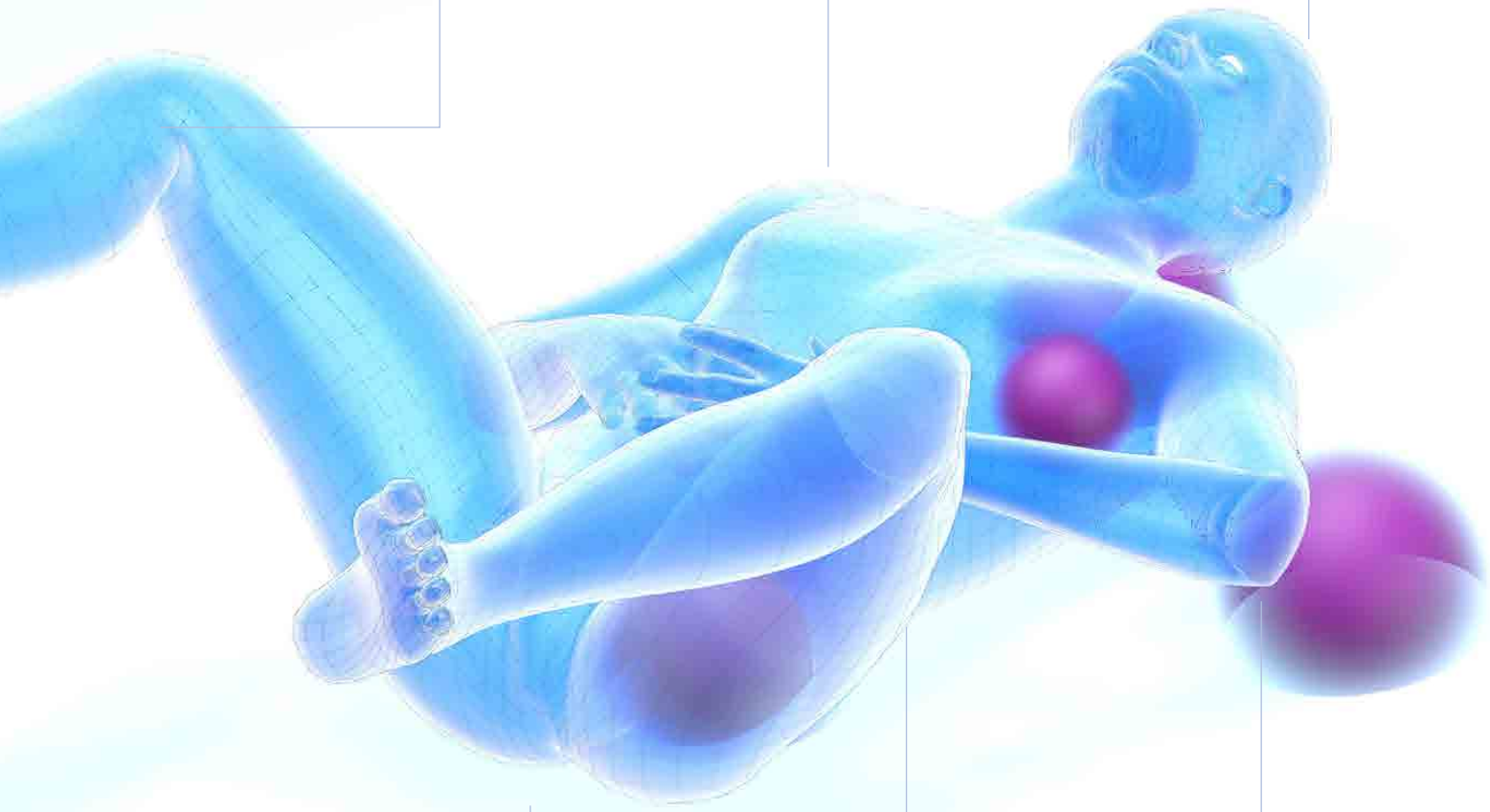
Shoulders

Apply counterthrusts to prevent slipping in case of Trendelenburg.



Head

The head must be locked.

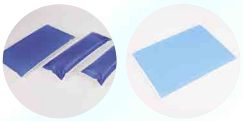


Perineal area

The perineal area must protrude from the tabletop about 3-5 cm to carry out the intervention.

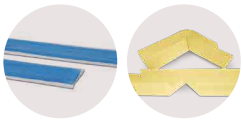
Low back area

Place a device to relieve pressure on the low back area.



Upper limb

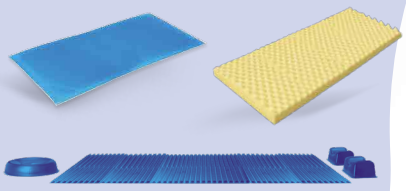
Place a device to relieve pressure on the arm and hand area on the abdomen.



4.0 Lateral decubitus position

Support base

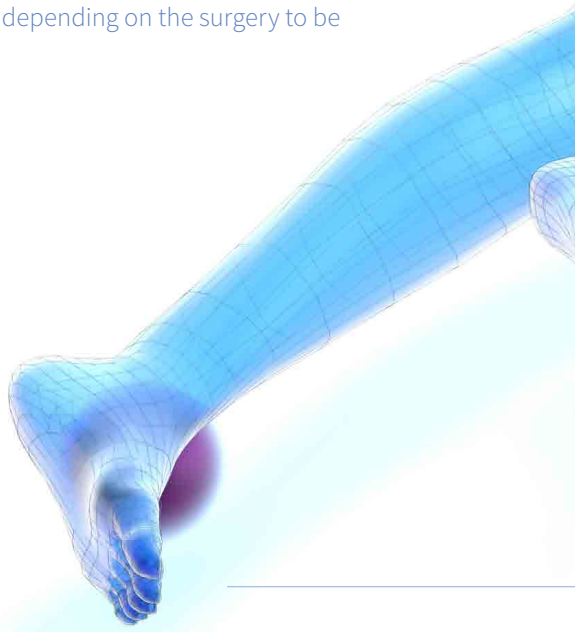
Being a difficult position to obtain, the use of a comfortable support surface is essential.



Position used for thoracic surgery and for kidney surgery. Being a difficult position to obtain, the use of a comfortable support surface is crucial.

- 1. lay the patient on his side;
- 2. the lower arm abducted on an arm sling, while the upper arm can be placed in suspension to a bridge arch, or on a second arm sling;
- 3. the lower knee slightly flexed, while that upper outstretched;
- 4. raise his head and lock it with a hollow cushion;
- 5. apply one containment band at pelvis level, and one at lower limb level.

The arm support must not exceed a 90° angle to the body. Flexion is applied differently depending on the surgery to be performed.

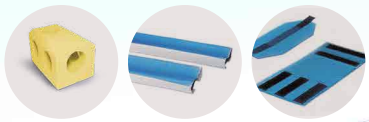


Pelvis

Apply a containment band.

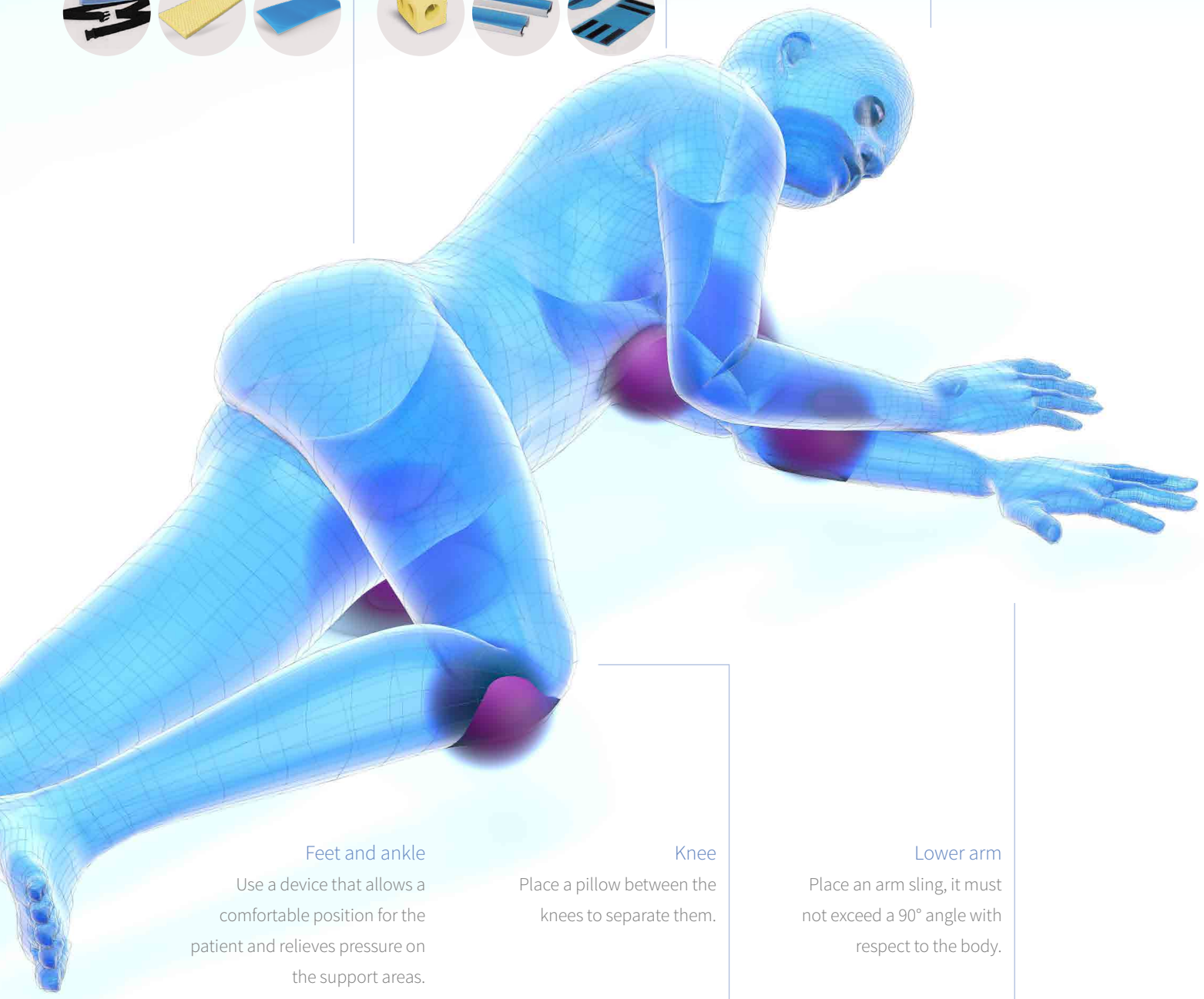
Upper arm

Place the suspended arm on a bridge headband, or on a second arm sling.



Head

The head must be raised and locked.

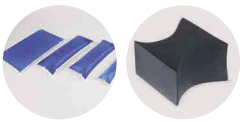


Feet and ankle

Use a device that allows a comfortable position for the patient and relieves pressure on the support areas.

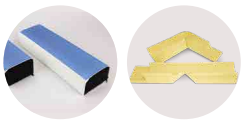
Knee

Place a pillow between the knees to separate them.

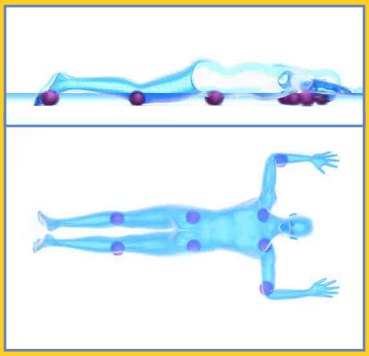


Lower arm

Place an arm sling, it must not exceed a 90° angle with respect to the body.

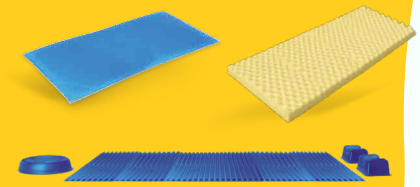


5.0 Prone position



Support base

It is essential to use a comfortable support surface, that relieves the pressure.



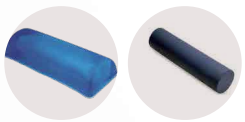
This position allows surgical access to the spine and the back of the head.

- 1. align the head with the rest of the body;
- 2. place a suitable device under the brow that allows the area to be left free for intubation;
- 3. place the upper limbs on the patient's sides or on the sides of the head, in a comfortable position;
- 4. bend the knees slightly;
- 5. place a cylindrical cushion under the instep.

The head must be aligned with the rest of the body and the face on a suitable device that allows the intubated area to be left free.

Feet and ankles

Place a cylindrical pillow under the instep.



Chest

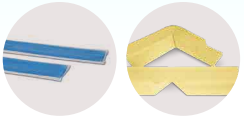
Place a device that relieves contact pressure.

Head

Apply a positioner that keeps the head aligned with the rest of the body and leaves the endotracheal tube free.

Upper Limbs

Place a device that allows a comfortable position for the patient.



Leg

Place a device that allows you to flex knees slightly and relieves support pressure.

Pelvis

Place a device that relieves pressure.

Products mentioned
on this White Paper

Each product designed for a specific use

Find out more online

Fireproof SKAY positioners

Safety and comfort

Core made of flame retardant polyurethane foam (density 30 kg /m³) and covered with fireproof SKAY fabric. It is recommended to use the devices covered with a disposable TNT cloth to ensure higher hygiene standard. Their structure allows the uniform distribution of pressure even with patients of very high body weight. They reduce abdominal pressure and improve performance during ventilation in the prone position.

...many other models available

Multi-purpose polyurethane positioners

For every positioning requirement

The multipurpose polyurethane positioners fit easily to the anatomy of the body, making them extremely comfortable and facilitating the maintenance of the correct position during surgical procedures. Made of flame retardant polyurethane foam with a load-bearing structure with variable density. Covered with a waterproof and sanitizable polyurethane film.

Find out more online

Products mentioned
on this White Paper

...many other models available

Gel positioners

Gel devices are used in the best operating theaters and allow the patient to rest comfortably on the surgical table

Patient undergoing surgery could be forced in the same position for hours, which is the time necessary for the onset of pressure injuries. They are compact and thanks to their physical characteristics and their density, they adapt to the body surface. Among the properties we recognize the following: water repellent capacity, they do not vary their hardness over time, if damaged by cuts, the gel does not come out, easily sanitizable, isothermal, they can be associated with heating or cooling mattresses. To increase comfort and prevention of skin lesions, we can combine them with polyurethane foam devices.

Find out more online

...many other models available

Disposable polyurethane positioners

For a complete support to each anatomical district

Polyurethane devices are combined with gel devices to increase the patient's comfort on the operating table, during long-term interventions. Sometimes they help optimizing the final positioning which is impossible to achieve with gel devices only. They also create excellent non-slip grip in positions that require maximum inclination. Recommended in dirty interventions in order not to damage or pollute the gel which, due to micro-lesions, could absorb infected material, sometimes even difficult to eliminate.

Find out more online

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