Orthotic Care and Wear Instructions

Lumbar-Sacral Orthosis (LSO)

General Description:

LSO is the acronym for Lumbar-Sacral Orthosis. This orthosis is frequently a two-piece plastic clamshell design (it may be a single piece that opens in the front or rear) that extends from the pelvis to the middle of the back. It is used to stabilize the spine after surgery or for fractured vertebrae.

Application:

If on spinal precautions, consult with a physician before putting on the LSO.

A cotton undershirt should always be worn under the LSO.

1. Begin by lying side-ways on a flat surface.
2. Place the posterior shell (back piece) against the back and slide it under the side of the body.
3. Align the waist indentations in the LSO to match the position of the waist.
4. Roll onto the back while holding the posterior shell of the LSO against the back.
5. Once flat on the back, re-align the shell to center it evenly on both sides of the body and to re-position it at the waist, if necessary.
6. Apply the front shell with sides overlapping the back shell, and tighten the straps.
   Straps must be kept snug to tight in order to maintain good support and to help lessen movement. Tighten the straps from bottom to top, keeping each pair of straps even on both sides.

Alternative Application:

If not on spinal precautions, the LSO may be donned while sitting, but should be repositioned and straps tightened, while standing. Waist indentations in the LSO should match the position of the waist, and the bottom-front of the brace should be very close to the pubic bone of the pelvis.

Wearing Schedule:

LSO should be worn according to physician’s specified schedule.
Cleaning and Maintenance:

The best way to clean a LSO is to spray the inside with rubbing alcohol and wipe dry to remove body oils and residue. It can also be cleaned by wiping it out with a damp towel and antibacterial soap, or anti-bacterial moist towelettes. **Do not immerse** the LSO in water as that may harm the straps. Keep the LSO away from excessive heat to prevent damage to the plastic.

Risks and Benefits:

**BENEFITS**
- Stabilizes and hold the spine in a neutral position
- Reduces back pain

**RISKS**
- May cause skin breakdown such as scratching, bruising, or blistering, which can cause serious complications if skin is not checked regularly or if device is not applied as directed.

Tips and Problem Solving:

- If the LSO is riding up under the arms or at the throat, it is probably too loose and requires repositioning.
- Avoid soft chairs and sit up straight or lean back slightly. This will help reduce pressure on the chest.
- Do not lean over the table while eating. The food should be brought to the mouth while sitting straight, again to help reduce pressure on the upper chest.

If there are any problems or questions with this brace, please contact the orthotist.