

**SANO-SPINE SKOLI**

Dear Patient,

You received a **scoliosis corset** from us today. The device was **individually produced with the newest technology**.

To receive **optimal benefit from your corset therapy, your cooperation and your willingness to wear your corset is a prerequisite**.

So you can better understand your orthotic device, we have compiled the following important information.

If you or your parents have further questions or desire additional information, please contact us at the at the telephone number listed.

We wish you a speedy and successful adjustment to your device.

Your SANOMED Team



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Handling · Wearing · Training · Personal Hygiene · Cleaning

If your corset is to function properly, it is **important** to make sure that the **corset sits correctly**. This begins with putting on the device.

If you have never worn a corset before, the correct use must be learned and trained, but with practice will soon be a routine.

From experience we know that it is **beneficial** to reach the **daily wearing time** (determined by your orthopaedic specialist e.g. 23 hours) **as quickly as possible**. On the first day, leave the corset on as long as possible, and increase the wearing time each subsequent day, so that within 10 to 14 days the prescribed daily wearing time is reached.

- **Wear a corset liner** or tight fitting T-shirt. Never wear your corset on bare skin!
- The corset closes in front. **Standing** upright, open the corset and slide it on, **across your back** and around your body. (Figs. 1 and 2)
- Now lay on a bed or a similar surface **on your back**, and **make sure that the corset sits properly** at the waist as determined by the corset form for the iliac crest. It is best to now to shift the device slightly higher. (Fig. 3)
- **Now tighten both fasteners to the markings** which were made by your doctor or orthopaedic specialist.
- Finally, in standing position, check the corset for a proper sit. In the area where the corset fits loosely against the body, pull it forward to prevent the corset from twisting on you. (Fig. 4)
- If necessary, pull on the T-shirt to remove any folds on points of pressure.



Normally, the period of adjustment is very short, and the corsets are well tolerated during the night. Often, even on the first night, one can sleep the night through while wearing the device.

The corset can be loosened for 30 minutes **while eating**. Afterward please tighten the brace to the markings.

During athletic activity, the corset should be removed and after showering, it should be put on again after the skin has been properly dried. Skin creams and lotions must have been fully absorbed otherwise the skin is soft and prone to damage.

To make your **skin** more resilient, treatment of points of pressure with alcoholic liniment or PC30V (obtained in specialist shops) is recommended.

When you remove the corset, and look at yourself in the mirror, you will note that **redness** develops where the **pads** sit. This is completely **normal**. Blue coloration or raw areas on the skin are undesirable and require an adjustment in the corset. Please contact us immediately.

Regular cleaning of the corset, for instance to remove odours, is useful:

Plastic and metal parts can be cleaned with soap and water, but leather parts should only be cleaned now and again with a damp cloth. A terrycloth towel is useful in drying the corset after it has been cleaned. Under no circumstances should the corset be dried in the sun or by a heat source (e.g. a heater or open flames) as this could alter the form of your device.

Disinfection of your corset is not normally necessary. If your parents want to disinfect the corset regardless, commercially available disinfectants such as Kodan Spray can be used.



Course of Treatment

After the corset has been properly fitted, the fit must be **examined in regular intervals** and **adjusted** in order to assure and/or improve therapy success.

An **x-ray examination in the corset** is usually made **six to eight weeks after** having received your device. For this purpose, the corset must be worn for about 24 hours before your appointment. Thereafter, the corset will usually be **examined in three-month intervals**.

Regular monitoring of body weight and height every two to three weeks is recommended in order to react quickly to body changes. Failure to do so could be detrimental to corset therapy progress and could result in pain or worsening of your scoliosis.

If you should **grow two or three centimetres**, you should **request a short-term appointment** with us or your orthopaedic specialist so that the corset can be **adjusted**.



Treatment Begin



3 Years after Treatment Begin

Corset Construction · Form · Mode of Operation

The **corset form** is designed with the **curvature of your scoliosis and related clinical particularities** of your body in mind. Due to the great variety of scoliosis forms, your corset may

differ, both visually and functionally, from the depicted braces. (Figs. 7, 8, 9 and 10)



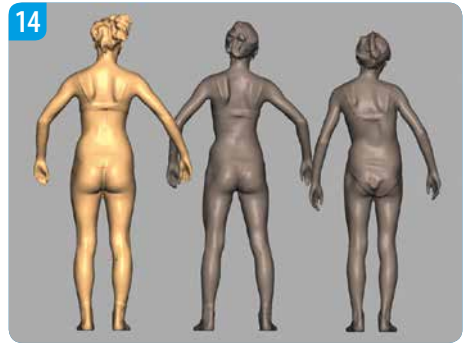
Generally, the scoliosis corset is designed **asymmetrically**. In other words, the corset is **practically a mirror image of your body / your scoliosis**. Therefore, it is fully intended that you stand crooked in your brace. (Fig. 12)

Exceptions to this generalisation are types of cruciform designs where having both shoulders on the same level is desirable. (Fig. 13)



Brace Construction · Form · Mode of Operation

The **special design** of the brace makes a **three-dimensional straightening** of your body possible. In other words, correction success is not only seen in x-rays, but is also clinically observable on your body. (e.g. flattening of rib hump, flattening of lumbar bulge, improvement of the body's structural stability, etc.)



Patient Scan

(L) Mar. 2013 / (center) July 2012 / (R) Dec. 2010



The brace which encompasses your trunk, consists of polyethylene plastic with an opening in front. Generally, the device is secured with two hook and loop fasteners in a guided system. (Figs. **15** and **16**)

Brace construction consists mainly of **pressure zones** (pads) and **expansion zones** (spaces) which act upon the body.

The pads exert pressure on bowed body parts to move them in the direction of the expansion zones.



The expansion zones create space between the corset and your body, but they are necessary for body correction. (marked in red: Figs. **17** and **18**)

The passive pressures become **active** through **guided growth** and are supported by **special breathing exercises**, which are part of appropriate **physical therapy** (e.g. Schroth therapy).

Risk Disclosure

- Excessive warmth (e.g. Sun, open flames etc.) can damage corset form.
- Clothing may exhibit excessive wear particularly from abrasion with reclination brackets and corset edges.
- The brace should not come in contact with acids, salt water, etc.
- Skin irritation can develop due to excessive sweat build-up in the brace.
- Body growth in girth and height could cause the pads to lose their effectiveness, resulting in too much or too little pressure in the pressure zones (pain, pressure spots, deformation, diminished correction, or changes in the skin), or pressures might be applied too low (possible cessation of correction or worsening of scoliosis).
- Allergic reactions can be caused by sensitivity to materials.
- Prolonged failure to engage in physical therapy (e.g. Schroth therapy) can contribute to increasing trunk muscle weakness.
- Coloured corsets can leave stains on clothing or bed linens.

In the case of questions or problems, please contact your orthopaedic technician or your doctor immediately.

What is scoliosis?

In the case of scoliosis, a mainly sideways curvature of the spine is caused by rotation (twisting on the spinal axis) and torsion on the vertebrae (twisting on their own axis).



In the area of the thoracic vertebrae, a rib hump forms, and in the lumbar area, a lumbar bulge forms. These changes are usually the first signs and are usually noticed coincidentally.

The causes, in addition to idiopathic scoliosis (cases where the causes of scoliosis development are uncertain) which comprises 80% off all cases, are classified as congenital scoliosis (e.g. due to abnormal vertebral development) and neuromuscular scoliosis (e.g. spina bifida, muscle disease).

The disease can surface in various stages of life and is named accordingly (congenital, infantile, adolescent, or degenerative scoliosis). Depending upon the amount of deformation, scoliosis is classified as thoracic scoliosis (upper back) or lumbar scoliosis (lower back).



What causes scoliosis?

Most cases of scoliosis are classified as "idiopathic scoliosis" which means that the causes and development are not known.

It is possible during growth that the vertebrae grow at different rates, thus becoming deformed (torsion) and twisted (rotation).

How do I, as a layperson, know if my child is afflicted?

Stand your child upright before you, and take note of the following points:

- Is the spine straight?
- Are the shoulders on the same level?
- Do the waist triangles (triangle formed between waist and downward-hanging arm) look the same?
- Is the pelvis straight?
- Observe your child when the upper body is bent forward to see if the back on both sides of the spine are the same height or if one side is higher than the other.

If abnormalities are noticeable, visit an orthopaedic specialist, who can give you an accurate diagnosis through use of x-ray.

The earlier scoliosis is detected, the greater is the treatment success.

