

Small Clubfoot Lexicon

The most important technical terms
explained in an understandable way

Dorsalextension

Dimeglio

Pirani-Score

Varus

Kinematic coupling

Ponseti

Pronation


Talus

Supination

Abduction

Plantarflexion


Adduction

<p>Abduction</p>	<p>„Outward spreading.“ From the Latin abducere „to lead away“: the splaying of a body part „outward“, i.e. away from the center of the body. The opposite is adduction.</p>
<p>Achilles tendon tenotomy</p>	<p>Cutting the Achilles tendon in children with clubfoot deformity. In young children, the Achilles tendon grows back together quickly. The procedure is usually performed percutaneously (through the skin) with a simple incision, without exposing the tendon itself.</p>
<p>Acquired clubfoot</p>	<p>Acquired or neurogenic clubfoot, unlike congenital clubfoot, is not present from birth. It can occur in the course of life and is usually caused by a disturbance of the nerve supply.</p>
<p>Adduction</p>	<p>„Drawing near.“ Sickle foot (pes adductus) is a malposition of the foot that often occurs as part of the clinical picture of clubfoot. In this case, the tips of the toes are turned inward toward the center of the body - that is, toward the big toe. The opposite is abduction.</p>
<p>Atypical clubfoot</p>	<p>The atypical, i.e. unusual clubfoot is significantly shorter and thicker than average and particularly stiff. A typical feature is a deep crease on the sole of the foot. Atypical clubfeet are corrected analogously to „typical“ clubfeet with redression casts and brace treatment.</p>
<p>Calcaneus</p>	<p>„Heel bone.“ The calcaneus is the largest bone of the foot skeleton. As the most posterior tarsal bone, it is connected to the lower leg muscles via the Achilles tendon.</p> <p>The gray marked area is the calcaneus (N).</p> 

<p>Clubfoot</p>	<p>Clubfoot is a complex deformity of the foot that combines various features. Typically, six deformities occur simultaneously in varying degrees in a clubfoot. These include:</p> <ul style="list-style-type: none"> - the foot is turned inward in relation to the ankle bone (talus) - a pointed foot (equinus), in which the shortened Achilles tendon pulls the foot downward - a sickle-shaped forefoot (pes adductus) - a hollow foot (pes excavus) with an elevated longitudinal arch - the heel bone (calcaneus) is turned inwards in the direction of the center of the body (pes varus) - the inner edge of the foot is raised (pes supinatus)
<p>Compliance</p>	<p>From the English „to comply“. Compliance describes the patient's active participation in a therapeutic measure.</p>
<p>Congenital</p>	<p>Already present at birth due to a genetic predisposition</p>
<p>Congenital clubfoot</p>	<p>Congenital clubfoot is a deformity that has been present since birth - and has genetic causes, among other things. The frequency is about 1-2 per 1000. Boys are affected twice as often as girls.</p>
<p>Conservativ</p>	<p>In conservative clubfoot treatment, the foot is not corrected by surgery (except for Achilles tendon tenotomy), but by a mechanical-physical measure. The integrity of the body is preserved (conserved).</p>
<p>Deformity</p>	<p>Malformation of body parts or organs, condition of malformation</p>
<p>Dimeglio</p>	<p>The Dimeglio score is a scoring scheme developed by Professor Alain Dimeglio to describe the severity of clubfoot. Four essential symptoms are considered (equinus, internal rotation, varus and adduction) and scored between 1 and 4. In addition, a maximum of four further points are added for „additional clinical signs“. The summed score between 0 and 20 provides information on the severity of the clubfoot, starting with severity 1 (mild, 0 - 4 points) to 4 (severe, 16 - 20 points).</p>

<p>Dorsal-extension</p>	<p>From Latin dorsal (concerning the back) and extension (stretching) - the foot is stretched in the direction of the back of the foot.</p>
<p>Equinus</p>	<p>„Pointed foot“ or „horse’s foot“ (pes equinus) is a deformity that causes the sole of the foot not to be completely placed. The cause is, among other things, an elevation of the heel.</p>
<p>Idiopathic</p>	<p>From Greek idios (self) and pathos (affliction), meaning without apparent or known cause. In idiopathic diseases, the cause of the disease is not known. The clinical picture of clubfoot is described by the symptoms (e.g. varus and adduction).</p>
<p>Kinematic coupling</p>	<p>In kinematic coupling, two bodies are connected in such a way that when one moves, the other automatically moves as well. Ignacio Ponseti had observed that the various foot bones in a clubfoot are fixed in their malposition via ligaments and tendons in such a way that the individual components cannot be moved independently of each other. This principle is applied in the multi-step plaster re-dressing according to Ponseti. In the first step, pronation of the forefoot is corrected, followed by varus and adduction malalignment. This corrects the foot not only visually but also functionally.</p>
<p>Lateral</p>	<p>From Latin „latus“, side. Lateral is an anatomical position designation that refers to the median plane (vertical plane of symmetry through the center of the body). Other positional designations are, for example, dorsal (lat. dorsum, back), i.e. located on the back side, and ventral (lat. venter, abdomen), located on the stomach side.</p>
<p>Manipulation</p>	<p>Term used in orthopedics for targeted, also manual techniques, which are intended to achieve a specific result through a particular maneuver. Example: The correction maneuver of abduction (external spread) of the foot below the fixed head of the talus (talus = ‚talus bone‘, foot bone).</p>

Orthosis	An orthosis - orthopedic prosthesis - is a medical device that restores or maintains the functionality of an impaired body part by stabilizing or correcting it.
Palpation	Examining by palpating and feeling structures or organs located just below the surface of the body.
Physiotherapeutic or French method	The French physiotherapist Frédérique Bonnet-Dimeglio combined Ponseti's grip and redression technique with Professor Henry Bensahel's bandaging technique in the late 1980s.
Pirani-Score	The Pirani score is a scoring scheme developed by Canadian physician Shaque Pirani to objectively quantify the severity of clubfoot. The score considers six well-described clinical symptoms for clubfoot (see there). The severity of each symptom is scored, with a choice of 1 = severe abnormality, 0.5 = mild abnormality, or 0 = anatomically normal.
Plantarflexion	The bending (flexion) of the foot in the direction of the sole of the foot (planta pedes).
Ponseti	The Spanish orthopedist Ignatio Ponseti (*June 3, 1914 - , October 18, 2009) developed a special redression technique in the 1950s in the USA by which a congenital clubfoot can be corrected without surgical intervention - the Ponseti method named after him.
Pronation	Inward rotation of the foot. The foot is rotated along its longitudinal axis (heel-to-toe). The outer edge of the foot is raised and the inner edge of the foot is lowered, without the heel also moving. The opposite rotation is called supination.
Recurrence	„Backsliding“, it refers to the recurrence of a disease after a successfully completed treatment.

<p>Redression</p>	<p>In a redression, an anatomical malposition is corrected manually and then fixed in the anatomically correct position, e.g. by means of a cast.</p>
<p>Supination</p>	<p>Outward rotation of the foot. The foot is rotated around its longitudinal axis (heel-to-toe). The inner edge of the foot is raised and the outer edge of the foot is lowered, without the heel moving with it. The opposite rotation is called pronation.</p>
<p>Talus</p>	<p>The talus, or ankle bone, is a short bone in the foot between the ankle fork (malleolus fork) and the calcaneus. It connects the foot to the leg and is part of the tarsus and ankle joint. In the bone model, the talus is colored slightly green (TH).</p> 
<p>Tendon transfer</p>	<p>In the event that the clubfoot cannot be completely eliminated by redression - or a recurrence occurs due to a lack of compliance - the deformity is corrected by subsequent minor surgical measures. This includes, for example, the lateral transfer of the tibialis anterior tendon.</p>
<p>Tenotomy</p>	<p>The surgical severing of the tendon, in this case: the Achilles tendon. Usually this is a closed tenotomy, i.e. a percutaneous procedure (percutaneous: through the skin), without exposing the tendon itself.</p>
<p>Varus</p>	<p>From the Latin varus, bent outward, crooked. Varus refers to an anatomical deformity in which the part of the foot farther away from the body, on the outside, points too strongly toward the center of the body. In a pes varus or calcaneus varus, the hind-foot is strongly bent inward.</p>

The SEMEDA Parent Information

In our parent information, we have summarized the most important information for parents about our orthoses and a correct brace treatment. You can download the brochures in various languages on our website at www.semesta.de in the section english/download/parents.

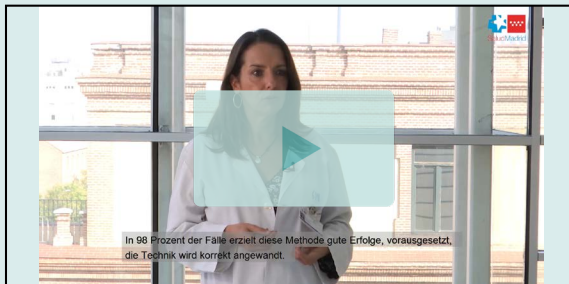


From albanian to turkish - 19 languages available

Ponseti Method Videos

On our website you will find a video section with informative films about the clubfoot treatment according to Ponseti, e.g. a background video about the Ponseti method at the Madrid University Hospital, under

www.semesta.de in the section english/download/videos



Have a look! The video is spanish with english subtitles



semeda®

ORTHOPAEDIC PRODUCTS

...step by step forward

About Sameda

For over 15 years, we are specialized in orthopedic solutions for Ponseti clubfoot treatment. Our orthoses, which we developed together with specialists, orthopedic technicians and engineers, are used in more than 27 countries worldwide.

You can find more information about Sameda at
www.semesta.de.

Specialists and orthopaedic technicians can order our products quickly and easily for example in our online store at
www.semesta-shop.de.

For affected parents and children we have a special webshop with encouraging clothing, helpful accessories and practical tips, at
www.semesta-eltershops.de.

SEMEDA GmbH

**Am Petersberg 36
D-29389 Bad Bodenteich
Deutschland/Germany**

Tel.: +49-(0)5824 98 555-0

Fax.: +49-(0)5824 98 555-20

Mail: info@semesta.de

Web: www.semesta.de