

Information material for parents of a baby with a suspected brachial plexus injury



Supplied by
Plexuskinder e.V.

Dear parents,

first of all congratulations on the birth of your child.

You are receiving this flyer from the German self-help organization Plexuskinder e.V. because your newborn might have suffered an injury to the nerve area on the side of the neck, the Plexus brachialis, at birth. This suspicion arises from observing your child's spontaneous arm movements.

This nerve network supplies the shoulder region and the entire arm with feeling (sensitivity) and movement (motor function) impulses for the muscles. The cause of this - in the vast majority of cases unilateral - nerve injury is overstretching of the neck during birth; in rare cases, tensile forces acting on the nerves can even lead to tearing of these nerves. This injury can be caused by an emergency situation with blockage of the shoulder region in the birth canal (so-called shoulder dystocia). This can also result in a fracture of the clavicle; however, such a fracture practically never requires intervention and usually heals quickly and well on its own in newborns.

Most of these injuries are merely stretches with only temporary impairment of arm movement. These children are only slightly affected, usually recover quickly, completely or almost completely and therefore usually have no functional limitations. Other children are more severely affected by persistent disorders of movement and sensitivity of the arm and require long-term treatment and possibly surgery. In the rare severe cases, considerable impairments can remain due to permanent signs of paralysis, muscle imbalances and growth disorders.

Who makes the diagnosis?

If not already noticed in the hospital, the pediatrician usually makes the diagnosis at the first (U2) check-up. It is important to note that the extent of the injury is not always immediately apparent and therefore a diagnosis may not be made until later.

How is it treated?

The standard procedure for this type of plexus paralysis is physical therapy, which should be initiated a few days after the diagnosis is made. In order to reduce stretching of the nerves, it is recommended that the arm is secured to the chest in a 90 degree elbow flexion for the first 10 days, e.g. by securing the arm to the newborn's body or in a sling. This also applies to children with a clavicle fracture, where the arm should not bend sideways or backwards. Physical therapists or nursing staff can show you how to do this in the clinic.

How do I find a physiotherapy practice?

Your pediatrician will usually recommend a physiotherapy practice. This should be a physiotherapy practice in your area that specializes in children and offers treatment on a neurophysiological basis. Ask about their experience with brachial plexus palsy. Also discuss handling (initially no pulling on the arm when you pick up the baby!), positioning and further procedures. Your child will be treated once or several times a week in the practice and you will be instructed to carry out the exercises at home - the essential thing is to stimulate hand and arm movements without stretching.

How do I find a specialist?

If the improvement of the movement restriction does not progress as hoped, it may be advisable to consult other specialists. Your pediatrician will be able to make suggestions, and this association, Plexuskinder e.V., or self-help groups may also be able to help you in your search.

An extensive injury with a torn nerve may require an operation in which the nerves are stitched back together. Rehabilitative measures are then necessary. The time window for these operations is limited.

Important support can come from self-help groups or other affected families. We are happy to act as an intermediary here.

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What parents should do

Shortly after the birth:

Look for a physiotherapy practice. Undergo physiotherapy in a practice and carry out exercises at home according to the physiotherapist's instructions. Document the development and movement sequences with photos, video recordings and a diary. Document the birth from the parents' point of view.

In the first few months:

If still necessary, physiotherapy must be continued in a practice and the exercises must continue to be carried out at home under the guidance of the physiotherapist. In individual cases, a possible need for surgery must be clarified during this time.

In the first year of life:

Continue physiotherapy in a practice and exercises at home, have surgery performed if necessary and carry out rehabilitation.

Psychological support:

Affected families should discuss and process the traumatic birth and its consequences with a psychologist or trauma therapist. We can also support you here.

Medical terms:

Plexus palsy, infantile plexus palsy, birth-associated (obstetric or birth-traumatic or infantile arm paralysis / brachial plexus injury / plexus paralysis, Erb's palsy, arm plexus palsy, birth injury, birth trauma after shoulder dystocia

Plexusparese, kindliche Plexusparese, geburtsassoziierte (obstetrische oder geburtstraumatische oder infantile Armlähmung /

Plexus brachialis Verletzung / Plexuslähmung, Erbsche Lähmung, Armplexusparese, Geburtsverletzung, Geburtstrauma nach Schulterdystokie

Self-help in Germany:

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<https://plexuskinder.de>

Internationale Self-Help:

<https://plexuskinder.de/international>

Wikipedia:

https://de.wikipedia.org/wiki/Kindliche_Plexusparese

https://en.wikipedia.org/wiki/Brachial_plexus_injury

https://en.wikipedia.org/wiki/Erb%27s_palsy

Kindernetzwerk:

<https://www.kindernetzwerk.de/images/glossar/Krankheitsbeschreibungen/Plexusparese.pdf>

All links and further information also under
plexuskinder.de/baby

Information as of 02/24

Literature from Plexuskinder e.V.:

Der geburtstraumatische Plexus brachialis Schaden

<https://plexuskinder.de/plexusfibel>

Children's books:

Herbie und sein Plexusarm

Herbie wird operiert

Herbie und seine Übungen

Ein Kind wie Herbie (Für Eltern)

A Child Like Herbie (For parents, in English) available as a free download <https://plexuskinder.de/achildlikeherbie>

All Available in German here

<https://plexuskinder.de/herbie>

Available in English from The Erb's Palsy Group

<https://www.erbspalsygroup.org.uk>

Professional literature:

Schulterdystokie und Plexusparese - Klinik, Prävention, Gutachten und Dokumentation, Prof. Dr. Thomas Schwenzer, Dr. Jörg Bahm, Hrsg., Springer Verlag, 2016

Bewegungsstörungen der oberen Extremität bei Kindern - Konservative und Operative Therapien, Dr. Jörg Bahm, Hrsg., Springer Verlag, 2017

Movement Disorders of the Upper Extremities in Children - Conservative and Operative Therapy, Dr. Jörg Bahm, Hrsg., Springer Nature Switzerland AG, 2021

Physiotherapy:

<https://www.physio-deutschland.de>

<https://www.vpt.de>

<https://www.vojta.com/de/>

