# **Caregiver Information on Migraines**

### How do migraine headaches manifest?

A migraine episode is usually associated with a severe headache, which can feel pulsating, but many children also feel pressure or a drilling sensation. There are also accompanying symptoms such as sensitivity to light and sound, and/or nausea and vomiting.

In about 17% of migraine patients, a migraine aura occurs before or during the headache. Find more information about aura and other migraine phases on the next page.

Migraine headaches occur in "episodes". How often your child develops a migraine episode can vary greatly. Some children have them once a month or less, while others may have them once a week.

A migraine episode often lasts for a few hours, although for some, it can last for up to three days. In young children, they are usually brief.

## How do migraines develop?

A migraine most often develops if you have a predisposition to it. Are there people in your family who suffer from migraines? If so, this increases the likelihood that your child will develop migraines as well.

There are various other **factors** that can trigger a migraine episode. These include inconsistencies in daily schedule or sleep rhythm, stress, lack of sleep, strong emotions, changes in the weather, and hormonal changes (e.g., during menstruation), just to name a few.

You can think of it like a rain barrel. During a downpour, the barrel fills with water until it eventually overflows – this is like the migraine episode, "spilling over" after the triggers have built up. Another image for this is what we call the "migraine generator", which keeps charging until it must quickly empty, like the migraine episode. The rain barrel or the migraine generator will empty eventually - but you can help them fill more slowly so that they empty less often. You can "drill holes" in the rain barrel so that the water rises more slowly. How to accomplish this is different for each person. Some examples include a keeping a regular daily schedule, getting plenty of exercise, and reducing stress.

If a factor frequently shows up before your child's migraine, it is called a trigger. If a trigger is experienced, the probability that a migraine will occur increases.

Trigger are not always observed in children. In young children, migraines are often observed in connection with exciting activities, such as birthday parties, holidays, travel, or other special activities. This is due to heightened emotional states and disruptions to typical daily/sleep routines.

During a migraine, the meninges and blood vessels in the brain are more sensitive. This is what causes pain. They become more irritated during movement, which is why migraine headaches (unlike tension-type headaches) are significantly intensified by movement and persist after physical activity has ended. This knowledge is used to differentiate between migraine and tension-type headaches, using the "bounce test". This involves asking your child to bounce up and down a few times. If the headache is much worse after a few minutes, your child is probably having a migraine. Your child should immediately take the prescribed pain medication (see "Treatment" on the next page) and rest for about 30 minutes.

If your child's headache does not get worse with the bounce test, this is an indication that your child likely has a tension-type headache. Help your child distract him- or herself and resume their daily routine.

Good to know: Migraine pain can be severe, but it doesn't damage your child's brain. Once the migraine is over, your child may be tired for a little while, but after that everything will be the same as before.

## **Migraine phases**

A migraine episode can consist of up to four phases. However, these do not always occur and not every child experiences all four phases. The phases are the pre-phase, aura, headache phase, and recovery phase. This means, that a migraine actually begins before you feel any headache pain.

Symptoms of the pre-phase include a pale face, dark circles under the eyes, noticeably quiet or irritable behavior, and frequent yawning or severe fatigue. These precursors often indicate that a migraine is starting. If your child has had a few migraine episodes before, you may already be familiar with your child's typical warning signs.

Some children have an aura before a migraine, though not necessarily before every episode.

With an aura, there may be visual disturbances such as flickering, reduced field of vision, or seeing black or colored dots, flashes, or spikes. Some children experience numbness or tingling in their hands, face, or tongue, or have speech problems. An aura occurs because nerve cells in the brain become extremely sensitive, even before the headache phase. The aura symptoms usually begin before the headache, last about 30-60 minutes, and may occur together or sequentially. The aura does not damage the brain.

If your child has a migraine with an aura and notices aura symptoms without pain, they should take their prescribed medication before the onset of the headache phase.

During the **headache phase**, strong pain suddenly appears. This is typical of migraines and the pain is often accompanied by nausea and vomiting and/or sensitivity to light and sound (sometimes to odors, too).

During the **recovery phase**, children can feel exhausted. Most of the time, however, children will fall asleep during the headache phase, not even noticing the recovery phase because they slept through it.

To understand your child's migraine episodes better, it can be helpful to keep a headache diary for about two months. Here, you can note the characteristics of the pain, accompanying symptoms, and potential triggers, among other things. This way, you can identify patterns. On our website, *headeggs.org* you can find a headache diary to print by using the search function at the top of the page, or using the "Downloads" section at the bottom.

### Treatment

A medical professional must make an official diagnosis before your child starts migraine treatment. They will recommend the appropriate pain medication and correct dosage for your child.

Taking this medication early is crucial to successfully treating a migraine episode.

Medication not only relieves pain, but it can also help the accompanying symptoms of migraine episodes. For example, early treatment can often prevent vomiting.

It also significantly shortens the duration of the migraine so children can resume their activities sooner.

If medication is used too late, it will hardly alleviate the pain and only slightly shorten the migraine's duration. Prescribed medication should be taken in the recommended dosage as soon as you are certain that a migraine is imminent (e.g. during the aura phase, or if the bounce test is painful).

It is important that only the medication prescribed by a medical professional is given, in the appropriate dose!

A larger dose will NOT be more effective and can even lead to undesirable side effects. A smaller dose may not sufficiently reduce pain.

You can tell that the medication is working well when your child notices pain relief after about 30-45 minutes and has significantly less pain 1-2 hours after taking the medication.

Regular exercise, relaxation, and a consistent daily schedule can help migraine episodes occur less frequently. For more information on migraines, visit the Migraine pages at *headeggs.org*. Here, you will also find a video with many helpful tips about migraines.

**Important**: Always take your child's pain seriously, but don't allow it to affect everyday life more than necessary. Your child should still go to school, engage in their favorite activities, and hang out with their friends. Remember, distraction helps reduce headaches!

Using effective treatment during a migraine means your child should need only a short break (until the medication takes effect). After that, everyday life can continue.