



What is a breath-holding spell?

Breath-holding is very common in toddlers and can sometimes occur in young babies. It affects about one in twenty children. A breath-holding spell may happen after a child has a minor accident, has a fright or gets upset. The child will then cry and hold their breath. Breath-holding spells often occur as part of toddler tantrums although the spell is a reflex reaction to an unpleasant stimulus and not a deliberate behaviour on the child's part.

Are there different types of breath-holding spells?

There are two types of breath-holding spells:

1. **Blue spells (cyanotic breath-holding)** are the most common type. The child starts to cry after anger, frustration, physical pain or fright. They lose their breath and turn red in the face followed by turning blue (especially around the mouth). This lasts only a short time and the child often goes limp, passes out or may even fall to the ground. A child may have a seizure after a blue spell, but this is rare.
2. **Pale spells (pallid breath holding)** are less common. They can occur very early in life and can be frequent causing considerable anxiety in the family. They do not have any serious consequences but they are frightening to witness. They also happen after a child has an upset or sudden startle, such as a minor bump on the head or fall. The child opens the mouth as if to cry but nothing comes out. They then faint and can look deathly pale. The child usually goes limp and falls to the ground. In longer spells they can arch the back and become stiff. Like blue spells, the child can rarely have a seizure. The child may recover quickly or may be drowsy and sleep for a while.

Some children have both cyanotic and pallid spells at one time or another in their lives.

What causes breath-holding spells?

Breath-holding spells are usually caused by either a change in the usual breathing pattern or a slowing of the heart rate. These reactions may be brought on by pain or by strong emotions, such as fear or frustration.

The cause of breath-holding spells is not known. In some children, breath-holding spells may be related to iron deficiency anaemia, a condition in which the body does not produce a normal number of red blood cells. Most children that go through a stage of breath holding do not have a serious problem and do not have epilepsy. Sometimes there is a history in the family of similar episodes.

Because breath-holding spells do share several features in common with seizure disorders, the two are often confused. In epileptic seizures, the child may turn blue, but it will be during or after the seizure and not before. Wetting and soiling are common in epileptic seizures, though it is rare with breath-holding spells.

Breath-holding spells occur when the child is fully awake and alert and not during sleep (apnoeas).

When do they start and will they stop?

The occurrence of breath-holding spells is equal between boys and girls. The spells usually start before 18 months of age and usually stop by six years. They rarely occur before six months of age. It is a condition that causes no short or long term consequences. Some children with pale spells may have faints as adults when they grow older.

How often do they occur?

Breath-holding spells vary in severity and frequency. They may happen fairly often, sometimes several times within a day, however, every child is different. Often parents who have witnessed one breath-holding spell can predict when another is going to happen.

Fact Sheet

Breath-holding spells



What to do during a spell?

Lie the child on their side and observe. Don't shake the child, put anything in the mouth, or splash water onto the child. Keep the arms, legs and head from hitting anything hard or sharp. Treat the child normally after the event. Do not punish or reward the behaviour.

Breath-holding spells resolve spontaneously soon after the child passes out, usually within 30 to 60 seconds, with the child catching their breath and starting to cry or scream. Rarely children will have real seizures as part of breath-holding spells, but these are brief and not harmful and there is no increased risk of the child later developing a seizure disorder. Occasionally the child may sustain injuries should they fall down during a breath-holding spell.

What needs to be done for my child?

Discuss the problem with your family doctor. Your child will need a thorough examination to see that they do not have any other problems such as an irregular heart beat. Breath-holders are usually healthy.

What should concern my family doctor and me?

1. Loss of consciousness and becoming very pale without any provoking factors.
2. Very frequent spells such as several per a day should be assessed. This may be within the spectrum of what can happen during a spell but it should be further investigated.
3. Children with breath-holding spells followed by prolonged stiffening or

shaking which goes on more than a minute and associated with slow recovery, needing several hours of sleep, or remaining confused for a long period of time.

What can be done in the meantime?

No special treatment is required. Anti-epileptic treatment is not effective and is rarely recommended. Iron deficiency should be looked for if frequent events. Treating the anaemia, if present, will often decrease the frequency of passing out. Observation and protection from injury are generally all that is required during an episode.

The parents' most important job is to not reinforce the breath-holding behaviour. Make sure your child gets plenty of rest, help him feel secure and help minimise and manage his frustration. It is important that the child is not treated in a special way or different from their siblings. Behavioural problems can outlast the period of time that the spell can occur. A behaviour modification program may help. Ask your doctor for help with this or contact your community health centre.

Remember

- Children commonly hold their breath after a fright or becoming upset.
- Children may appear drowsy and sleep for a while after a breath-holding spell.
- Children with breath holding don't usually have a serious underlying illness.
- Children should not be treated differently to other children after a breath-holding spell.

This fact sheet is for education purposes only. Please consult with your doctor or other health professional to make sure this information is right for your child.

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