Syncope is a temporary loss of consciousness. Fifty percent of people have at least one episode in their lifetime. It is most common in teenagers between 15-19 years old. Symptoms include feeling faint, dizziness, weakness and lightheadedness.

Syncope is usually benign. A short period of confusion may follow a syncopal episode. The patient may become stiff or jerk with the syncope. Recovery is usually within minutes.

Breath Holding spells occur between six months and four years. It is rare under six months of age.

**Help us by:**

- Describing the episodes.
- Telling us if there is anything that causes the syncope.
- Telling us if there is a family history of syncope or sudden death.
- Telling us if there a history of trauma seizures, headaches, heart disease, hormone, or kidney disease.

**Types of Syncope**

**Vasovagal syncope** is fainting. It is the most common type of syncope. The episode often occurs while standing in a warm, crowded environment, or when the patient is emotionally upset or stressed. Blood drawing or public speaking may cause fainting. Episodes are more common when the patient is tired, hungry, ill or dehydrated. Older children report a feeling of warmth, a “cold sweat,” or nausea before they faint. Witnesses describe the child as being pale with dry skin. The loss of consciousness typically lasts less than one to two minutes. The patient may be pale, sweating, or generally feel “washed out” for a period of a few hours. If the patient returns to the upright position too quickly, loss of consciousness may recur. Rarely, seizure activity (stiffness or shaking) may occur as the patient wakes up.

**Orthostatic Syncope** occurs when the patient suddenly stands up. The patient complains of dimming vision or seeing a “window shade being pulled down.”

**Cyanotic Breath holding Spells** occurs in young children following a prolonged crying temper tantrum. They turn blue, become stiff or even jerk.

**Pallid Breath Holding Spells** occur after a young child is startled, falls, or has a minor bump on the head. There is not a prolonged period of crying, and the child falls limp to the ground.

**Cardiac Syncope** includes an arrhythmia (rapid or irregular heart rates) and heart blockages such as birth defects or aortic stenosis.

**Neurologic Syncope**

**Seizures** may be a cause of syncope. There is stiffness and jerking. The patient may have an aura (symptoms that occur before the syncope such as complaints of strange visual sensations). When a seizure causes syncope, the patient is drowsy for a prolonged period of time.

**Basilar Migraine Headaches** present with slurred speech, vertigo, and the patient walking as if they are drunk. The patient has a pounding headache at the base of the skull when he recovers.
Other Types of Syncope

**Reflex Syncope** occurs during specific situations such as coughing, sneezing, urinating or hair brushing.

**Metabolic Syncope.** Hypoglycemia is a rare cause of syncope. Symptoms include hunger, sweating, dizziness and agitation. A blood test showing a low blood sugar at the time of the episode is required for this diagnosis. Glucose tolerance testing and fasting blood sugar test is not useful.

**Hyperventilation Syncope** occurs in panic attacks or during anxious moments.

**Hysterical Syncope** is not common. The patient does not report typical syncopal symptoms. The heart rate, blood pressure, and blood sugar remain normal. The patient does not injure themselves when he falls.

**Medication-induced Syncope** may occur with blood pressure pills.

Evaluation of Syncope:

A thorough history and physical exam and tests will diagnose most cases. Testing often includes blood glucose, chemistries, CBC, EEG and EKG. An MRI, CT Scan, or angiogram may be ordered.

A Holter Monitor (24-hour EKG monitor) is ordered if there is an irregular heart rhythm. An echocardiogram is done if a heart defect is suspected. Those patients with a history of syncope with exercise may require an exercise stress test.

Tilt table testing has become an important part of the diagnostic workup of children with syncope. It is generally used in patients with frequent or unusual episodes. The patient lies down on a tilt table. After a variable period of time, the patient is tilted to an upright position of 60 to 90 degrees. Blood pressure, heart rate and EKG is continuously monitored.

Therapy:

For Vasovagal Syncope the patient should stay well-hydrated, cool, and avoid prolonged standing or situations that cause his syncope. With Orthostatic Syncope the patient should sit up more slowly. If he feels like passing out, he should immediately lie down or put his head between their knees. Exercise such as running or weight lifting improves muscle tone and lessens these episodes. For breath holding spells, the parent should remain calm and try to ignore the screaming, tantruming child.

If conservative therapy fails, medication may be indicated. beta blockers (Tenorman), salt retention (Florinef), Zoloft, Norpace or increasing the patient’s salt intake may help.

**Warning signs**

Let us know if Syncope occurs with:

- Chest pain
- After a head trauma
- Muscle weakness
- Headache
- Exercise

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