Date: 17th December-2024

SYMPTOMATOLOGY AND CLINICAL COURSE OF AFFECTIVE-RESPIRATORY PAROXYSM

Abidova Munojatxon
Fergana medical institute of public health, assistent

The symptomatology of affective-respiratory paroxysm (ARP) is characterized by specific clinical manifestations that vary depending on the subtype of ARP: **cyanotic**, **pallid**, or **mixed forms**. Each subtype presents with distinct symptoms and triggers, making a thorough understanding of their features essential for accurate diagnosis and differentiation from other conditions such as epilepsy, cardiac disorders, or respiratory illnesses.

In **cyanotic ARP**, which is the most common form, the episodes are typically triggered by emotional distress, such as anger, frustration, or temper tantrums. The episode begins with a loud cry or scream, often following an upsetting event. The child then holds their breath during forced expiration, resulting in progressive cyanosis—bluish discoloration around the lips, face, and extremities—due to reduced oxygen levels in the blood. The child may become limp or rigid, with visible signs of hypoxia such as a loss of facial expression and body tone. If breath-holding continues, the child may lose consciousness briefly, though the episode usually resolves spontaneously within 30 to 60 seconds. Once the child begins breathing again, normal color and muscle tone return, and recovery is rapid, with no lasting neurological impairment. Cyanotic ARP episodes are often dramatic in appearance and cause significant parental concern, but they are physiologically benign.

Pallid ARP, on the other hand, is primarily triggered by sudden pain or fright, such as a minor fall, injury, or unexpected stimulus. Unlike cyanotic ARP, pallid episodes are characterized by an exaggerated vagal response, which leads to a sudden drop in heart rate (bradycardia) and blood pressure (hypotension). The child becomes pale (hence the term “pallid”), limp, and unresponsive, often fainting (syncope) due to reduced cerebral blood flow. Pallid ARP episodes are typically silent, without the loud crying or breath-holding seen in cyanotic ARP. The child may lose consciousness briefly but recovers quickly, regaining normal color and responsiveness within a few seconds. In some cases, mild muscle twitching may occur, resembling a seizure, but this is due to cerebral hypoxia rather than true epileptic activity. Pallid ARP episodes are less common than cyanotic ARP but are equally distressing to observe, particularly because of their abrupt and silent nature.

In rare cases, children may experience **a mixed form of ARP**, which combines features of both cyanotic and pallid episodes. For instance, an episode may begin with intense crying and breath-holding (cyanotic features), followed by pallor and fainting caused by a vagal response (pallid features). Mixed episodes are less common and can complicate the clinical presentation, requiring a detailed history and careful observation to differentiate from other conditions.

The clinical manifestations of ARP episodes follow a predictable sequence, making them distinguishable from other disorders. Regardless of subtype, episodes are self-limiting, typically lasting less than one minute, and are followed by a rapid and complete recovery without residual neurological symptoms. Importantly, ARP episodes occur in response to specific triggers, such as emotional distress, frustration, pain, or fear, which helps differentiate them from unprovoked conditions like epileptic seizures or cardiac arrhythmias.

Overall, the symptomatology of ARP is well-defined and predictable, with cyanotic ARP presenting with breath-holding and cyanosis, pallid ARP characterized by pallor and syncope, and mixed ARP combining features of both. Recognizing the specific symptoms and understanding the sequence of events during ARP episodes is essential for accurate diagnosis, reassuring families, and avoiding unnecessary medical interventions.

The progression and typical sequence of affective-respiratory paroxysm (ARP) episodes follow a well-defined pattern, allowing healthcare providers to identify and differentiate these events from more serious conditions. Regardless of the subtype—cyanotic, pallid, or mixed—ARP episodes are predictable in their onset, course, and resolution. Understanding the progression of these episodes is critical for proper diagnosis and management, as well as for reassuring parents about the benign nature of the condition.

In cyanotic ARP, the sequence typically begins with a triggering event, such as emotional distress, anger, frustration, or prolonged crying. The child often starts with a loud cry or scream, which signals the initial emotional reaction. Following this, there is a phase of forced expiration, where the child involuntarily holds their breath, leading to an interruption in airflow. As breath-holding continues, the child develops cyanosis, characterized by bluish discoloration of the lips, face, and extremities due to a drop in blood oxygen levels (hypoxia). If breath-holding is prolonged, the child may lose muscle tone, become limp, and briefly lose consciousness. The episode typically resolves spontaneously within 30–60 seconds as the child begins to breathe again. Recovery is rapid, with the child regaining normal color, responsiveness, and muscle tone almost immediately. After the episode, the child may appear tired or momentarily irritable but generally returns to baseline without neurological deficits.

REFERENCES:

1. Guzeva V.I. Epilepsy and non-epileptic paroxysmal conditions in children. M.: Medical Information Agency. 2007; 268 p.
2. Haritonov R.A., Ryabinin M.V. Affective-respiratory seizures (clinic, pathogenesis, and rehabilitation). *Journal of Neurology and Psychiatry.* 1990-6:5-10.
3. Korostovtsev D.D., Guzeva V.I., Fomina M.Yu. et al. Non-epileptic paroxysmal disorders in children. *Teaching aid.* St. Petersburg: Publishing House of St. Petersburg State Medical Academy, 2006; 40 p.