

### Breath Holding Attack

\*Ali MA<sup>1</sup>, Muslima AHM<sup>2</sup>, Bari MA<sup>3</sup>

Breath holding attacks are common among healthy young infant and children from 6 months to 5 years<sup>1</sup>. Family history may be present among 20-30% cases. Incidence is more among male children<sup>2</sup>. Pattern of mode of inheritance is automat dominant. Recurrent, early onset and severe breath holdingspells are associated with several genetic syndromes such as 16p 11, 2 micro deletion syndrome and Riley day syndrome<sup>3</sup>. Etiopathogenesis is unknown but its thoughts most likely multifactorial. Inability to control the autonomic nervous system play significant role in the pathogenesis<sup>4</sup>. During frustration and anger overactivity of respiratory muscle associated with intense cortical activity occur. To control the over activity of the cortex and respiratory muscle children hold the breath up to the point of cerebral hypoxia. Parasympathetic hyperactivity vigil inhibition is also responsible for pathogenesis of pallid breath holding spell<sup>1</sup>. In some studies found delayed myelination associated with breath holding attack among preschool children<sup>5</sup>. It assumes that breath holding spelling may be due to imbalance between oxidant and anti-oxidant system of the body<sup>6</sup>. Breath holding attack is also associated with Iron deficiency anemia. Some thoughts that deregulation of autonomic nervous system is responsible for breath holding attack which occurs due to iron deficiency anemia<sup>7</sup>. The characteristics of breath holding attack are stay less than 1minute, associated with bradycardia and normal EEG findings<sup>2</sup>. There are many differential diagnoses of breath holding attack but top of most is epilepsy. Epilepsy, Sudden breath holdingduring sleep, Sepsis, Hyperplasia (Stiff body syndrome or startle disease), Shuddering, Congenital laryngeal stridor, Laryengospasm, and Whooping cough can be considered as differential diagnoses. That all can be differentiated by characteristics

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clinicalfeatures<sup>8</sup>. there is no role of investigation for diagnosis. Complete blood count and serum iron should be done if anemia is present<sup>9</sup>. ECG should be done to excude prolong QT syndrome. Though It is benign condition<sup>10</sup>. But it may causes anxiety, depression and psychosocial problem among parents of severe breath holding attack children<sup>11</sup>. Affected children have normal intelligence and normal neurological development<sup>12</sup>. Main crucial part of the treatment is to explain the disease pattern and also to give the reassurance to the parent of child<sup>13</sup>.Treatment of iron deficiency anemia by iron reduces the frequencies of attack<sup>14</sup>. In many studies found that Glycopyrotol a synthetic quaternary ammonium compound effective in the treatment of children suffering from severe pallid breath holding spells<sup>15</sup>. Fluoxetine also found effective in the treatment of Pallid breath holding spells of children<sup>16</sup>. Cardiac pacemaker implantation is effective treatment in cyanotic breath holding spells associated with prolonged a systole<sup>17</sup>. The result of many studies were infavor that Pierceton is effective in the treatment of breath holding attack<sup>18</sup>. Theophylline is also effective in the treatment of breath holding attack<sup>19</sup>. It disappear spontaneously before school going age. Prognosis is excellent. So, cornerstone of treatment is to give confidential reassurance and counseling to the family members.

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1.\*Prof. Dr. Md. Ayub Ali, Head of the Department of Pediatrics, President Abdul Hamid Medical College.  
2.Dr. AHM Muslima Akter Assoc. Prof. Department of Pediatrics, President Abdul Hamid Medical College.  
3.Dr. Md. Abdul Bari, Resident Physician, President Abdul Hamid Medical College  
Address of Correspondence:Prof. Dr. Md. Ayub Ali, Head of the Department of Pediatrics, President Abdul Hamid Medical College. E-mail:ayub1162@gmail.com; Cell Number: 01718033762.

## Editorial

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