

ASSESSMENT OF QT INTERVAL ABNORMALITIES ON ELECTROCARDIOGRAM IN CHILDREN WITH BREATH-HOLDING SPELLS

AIM: To assess QT interval abnormalities among children with breath-holding spells

SUBJECTS	METHODS	RESULTS			
<p>Cases: Children < 3 years with typical history of breath-holding spells (n=104)</p> <p>Controls: Healthy children < 3 years, attending vaccination clinic (n=100)</p>	<p>Case control study</p> <p>Parameters evaluated-</p> <ul style="list-style-type: none"> ➤ Age of onset, spell type (pallid/cyanotic), triggering factors, frequency, family history. ➤ ECG for QT related parameters 	<p>Cyanotic spells seen in 86 (82.7%)</p> <p>Pallid spells seen in 18 (17.3%)</p>			<p>Significantly prolonged QT, QTc, QTD and QTcD were observed among children with breath-holding spells compared to controls,</p>
<p>Children Excluded: Those with underlying systemic disorders/on drugs like macrolide, quinolone groups, ondansetron and frusemide</p>		<p>ECG parameters</p> <p>Mean (SD)</p>	<p>CASES</p> <p>(n=104)</p>	<p>Control</p> <p>(n=100)</p>	
		<p>QT interval (ms)</p>	<p>320 (0.05)</p>	<p>300 (0.02)</p>	
		<p>QTc interval (ms)</p>	<p>420 (0.07)</p>	<p>370 (0.03)</p>	
		<p>QT dispersion (ms)</p>	<p>61.15 (16.20)</p>	<p>38.6 (14.28)</p>	
		<p>QTc dispersion (ms)</p>	<p>102.3 (17.24)</p>	<p>78.6 (14.28)</p>	
		<p>Pallid breath-holding spells had significantly prolonged mean QT, QTc, QTD and QTcD interval as compared to cyanotic spells ($P<0.001$)</p>			

Conclusion: Echocardiography may be considered in children with breath-holding spells , especially those with younger age of onset and pallid spells, as these children are likely to have underlying long QT syndrome.

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