Introduction

- Long QT Syndrome (LQTS) is a life threatening genetically-inherited cardiac arrhythmia disorder affecting approximately 1:2500 persons, often diagnosed in childhood.
- Management of LQTS changes patients’ lifestyles which can affect quality of life (QoL). Patients have restrictions in physical activity, diet, treatment of noncardiac conditions; take daily doses of medicine and/or have implantable cardiac devices (pacemaker/defibrillator).
- General pediatric cardiac patients show significantly worse QoL in comparison to healthy controls.
- Nearly 1 in 5 with other cardiac disorders reported impaired psychosocial functioning.
- The effects of implanted cardiac rhythm devices in cardiac patients demonstrated a significant effect on QoL in pediatric patient scores.
- LQTS patients are typically not assessed for psychological symptoms.
- Little research on QoL in pediatric LQTS patients has been conducted to determine if psychosocial interventions are warranted.

Methods

- IRB approval was obtained at both PCOM and CHOP, as part of a larger study.
- Participants: 24 children, X = 13.4 years; 58.3% female, 95.8% Caucasian.
- The Cardiac Module of the PedsQoL was given along with other questionnaires measuring psychosocial functioning.
- Measures were completed an average of 5.59 years after receiving the diagnosis of LQTS.
- 39.1% of participants had been symptomatic since receiving the diagnosis.
- 100% of the patients are currently taking cardiac medication.
- Z scores were used to compare the dimensional scores for children diagnosed with LQTS to the norms for the Cardiac Module of the PedsQoL.

Table 1. Characteristics of LQTS Patients and Normed Group

<table>
<thead>
<tr>
<th>Dimensional Scale</th>
<th>Normed</th>
<th>LQTS Patient</th>
<th>Z Test</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Problem</td>
<td>76.02</td>
<td>76.09</td>
<td>0.0201</td>
<td>0.492</td>
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<tr>
<td>Physical Appearance</td>
<td>79.34</td>
<td>80.43</td>
<td>0.2105</td>
<td>0.417</td>
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<tr>
<td>Treatment Anxiety</td>
<td>76.09</td>
<td>82.26</td>
<td>-1.36</td>
<td>0.088</td>
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<tr>
<td>Cognitive Problems</td>
<td>75</td>
<td>75.66</td>
<td>-0.157</td>
<td>0.44</td>
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<tr>
<td>Communication</td>
<td>70.65</td>
<td>78.84</td>
<td>-1.74*</td>
<td>0.041</td>
</tr>
</tbody>
</table>

Table 2. Differences comparing normed scores and LQTS scores on PedsQL Dimensional Scales

Conclusions

- No significant differences were found on the Heart Problems, Physical Appearance, Treatment Anxiety, and Cognitive Problems Dimensional Scores.
- Communication scores were different and was more of a concern for LQTS patients.

References

1Philaeadelphi College of Osteopathic Medicine & 2The Children’s Hospital of Philadelphia