Cardiovascular Assessment In Girls And Women With Turner Syndrome: A Survey of Current Practice In The United Kingdom

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In 2007, the Turner Syndrome (TS) Consensus Study Group developed an international guideline for clinical care of girls and women with TS. Given emerging concerns of long term cardiovascular complications, the consensus recommends that cardiac MRI should be performed when girls are old enough to tolerate the procedure or at the time of transition and to be repeated at least every 5-10 years. Blood pressure should be measured annually.

Methods
We conducted a survey of cardiovascular (CVS) assessment in girls and women with TS in all tertiary paediatric endocrinology centres and all adult centres with dedicated TS clinical service in the UK.

Professional Background of Responders
An online survey was sent to 49 consultants (20 paediatric, 29 adult). There were 26/49 (53%) responders.

Background

Are all girls with Turner Syndrome referred to see a cardiologist to undergo the cardiovascular imaging in your clinic?

Paediatric  
Adult

What modality of cardiovascular imaging do you use in girls with Turner Syndrome?

Paediatric - diagnosis  
Paediatric - adolescence

Which modality of cardiovascular imaging is used in women with Turner Syndrome in your clinic?

Adult  
Adult – FU (100% repeat)

Is aortic sized index (ASI) provided in your echo / MRI reports?

Paediatric  
Adult

How often do you monitor blood pressure in girls and women with Turner Syndrome?

<table>
<thead>
<tr>
<th>Frequency of BP monitoring in Paediatrics (responders,n=12)</th>
<th>Frequency of BP monitoring in Adults (responders,n=13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annually (n,%), 3, 25%</td>
<td>10, 77%</td>
</tr>
<tr>
<td>6-monthly, 6, 50%</td>
<td>2, 15%</td>
</tr>
<tr>
<td>3-4-monthly, 3, 25%</td>
<td>-</td>
</tr>
<tr>
<td>Every Clinic, -</td>
<td>1, 8%</td>
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</tbody>
</table>

Discussion
Despite the existing consensus, this survey, of clinicians providing care to individuals with TS in the UK, demonstrates wide variation in cardiovascular assessment especially in adolescence. This variability may relate to access to local expertise and specialist investigations. Uncertainties surrounding the value of investigations to clinical outcome of aortic dissection especially in childhood may also be a factor.