An audit on the diagnosis of multiple pregnancy

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Introduction

- The incidence of multiple pregnancy has risen in the past 30 years. (1980: 1/1000, 2011: 16/1000)
- Increase secondary to use of assisted conception and increasing maternal age.
- Management plans dependent on correct chorionicity.

Objectives

- To assess compliance with NICE quality standard 46.

NICE quality standard 46 - Standards

1. Women with a multiple pregnancy should have the chorionicity and amnionicity of their pregnancy determined using ultrasound and recorded between 11 weeks 0 days and 13 weeks 6 days

2. Women with a multiple pregnancy have their fetuses labelled using ultrasound and recorded between 11 weeks 0 days and 13 weeks 6 days

Methods

- Retrospective review of dating ultrasound scans reports and images using Viewpoint (pregnancies where one or both fetuses had early demise below 14/40 excluded)
- Over 6 month time period (October 2013 to April 2014)

Results

- 80 multiple pregnancies
  - Spontaneous pregnancies 60 (75%)
  - 10 assisted (12.5%)
  - 10 not documented (12.5%)

- 14 early fetal demise (18%)
- 66 dating USS available for review

- DCDA (45) - 68%
- MCDA (16 - 25%)
- MCMA (2) - 3%
- Triplet (1) - 2%
- Indeterminate (1) - 2%

Standard 1. Determination of chorionicity/amnionicity between 11+0 and 13+6

<table>
<thead>
<tr>
<th>Late booker</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANC elsewhere/transfer of care</td>
<td>4</td>
</tr>
<tr>
<td>Not known</td>
<td>7</td>
</tr>
<tr>
<td>DNA</td>
<td>1</td>
</tr>
</tbody>
</table>

51 dating USS performed at correct time

100% of scan reports assigned chorionicity

All 3 cases where chorionicity was unconfirmed labelled initially as DCDA, on later scans relabelled as MCDA

Standard 2. Labelling of fetuses between 11+0 and 13+6

<table>
<thead>
<tr>
<th>USS for</th>
<th>Standard (%)</th>
<th>NMUH rates (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dating scan under 14/40</td>
<td>100</td>
<td>77</td>
</tr>
<tr>
<td>Chorionicity assigned on USS</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Correct chorionicity</td>
<td>100</td>
<td>94</td>
</tr>
<tr>
<td>Twin labelling on USS</td>
<td>100</td>
<td>82</td>
</tr>
</tbody>
</table>

Conclusions

- Sonographer training for correct chorionicity and labelling of twins. If uncertainty regarding chorionicity, ask for second opinion
- Twin proforma can improve/provide uniform standard of care

References

- 1. NICE quality standard 46 (September 2013).