EP04.02. Ultrasound reference ranges for fetal prenasal thickness and its role as screening test for chromosomal abnormalities at 16-25 weeks of gestation. Parra-Cordero, M.1,2; Sepulveda-Martinez, A.1; Socias, P.1; Muñoz, H.1; G Rencoret2,Figueroa, J2.1Fetal Medicine Unit, University of Chile Hospital and 2San Borja Arriarán Hospital

Aims of this study:

- To establish prenasal thickness (PNT) reference ranges throughout gestation and to evaluate its value as screening test for chromosomal defects

Subjects and Methods:

1. Reference ranges:
   a) Fetal profile was examined in 3,904 consecutive euploid singleton pregnancy between 16 to 41 weeks.
   b) Data was Log transform and fitted using a second-order polynomial equation

2. 2nd trimester screening test for aneuploidy
   a) N= 3,249 between 16-25 wk
   b) Aneuploidies = 33 (Tr21=19; 8 Tr18; 3 Tr13)
   c) DR, FPR & LR for increased PNT were obtained

RESULTS:

<table>
<thead>
<tr>
<th>Condition</th>
<th>PNT &gt; 95th centile</th>
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<tbody>
<tr>
<td>Euploidy</td>
<td>156 (4.9%)</td>
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<tr>
<td>Trisomy 21</td>
<td>11 (57.9%)</td>
</tr>
<tr>
<td>Trisomy 18/13</td>
<td>1 (9.1%)</td>
</tr>
</tbody>
</table>

CONCLUSION

- PNT increases throughout gestation in chromosomally normal fetuses, although this is much thicker in abnormal karyotype, and particularly in trisomy 21. PNT might be included as a second trimester soft marker for chromosomal abnormalities