

**Appendix I**

## Risk of major trisomies in relation to maternal age and gestation

**Table 1 Risk of Trisomy 21 (Snijders et al. Ultrasound Obstet Gynecol 1999;13:167-70)**

| <b>Maternal age<br/>(years)</b> | <b>Gestational age</b> |                 |                 |                 |                 |                 |
|---------------------------------|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                 | <b>10 weeks</b>        | <b>12 weeks</b> | <b>14 weeks</b> | <b>16 weeks</b> | <b>20 weeks</b> | <b>40 weeks</b> |
| 20                              | 1/983                  | 1/1068          | 1/1140          | 1/1200          | 1/1295          | 1/1527          |
| 25                              | 1/870                  | 1/946           | 1/1009          | 1/1062          | 1/1147          | 1/1352          |
| 30                              | 1/576                  | 1/626           | 1/668           | 1/703           | 1/759           | 1/895           |
| 31                              | 1/500                  | 1/543           | 1/580           | 1/610           | 1/658           | 1/776           |
| 32                              | 1/424                  | 1/461           | 1/492           | 1/518           | 1/559           | 1/659           |
| 33                              | 1/352                  | 1/383           | 1/409           | 1/430           | 1/464           | 1/547           |
| 34                              | 1/287                  | 1/312           | 1/333           | 1/350           | 1/378           | 1/446           |
| 35                              | 1/229                  | 1/249           | 1/266           | 1/280           | 1/302           | 1/356           |
| 36                              | 1/180                  | 1/196           | 1/209           | 1/220           | 1/238           | 1/280           |
| 37                              | 1/140                  | 1/152           | 1/163           | 1/171           | 1/185           | 1/218           |
| 38                              | 1/108                  | 1/117           | 1/125           | 1/131           | 1/142           | 1/167           |
| 39                              | 1/82                   | 1/89            | 1/95            | 1/100           | 1/108           | 1/128           |
| 40                              | 1/62                   | 1/68            | 1/72            | 1/76            | 1/82            | 1/97            |
| 41                              | 1/47                   | 1/51            | 1/54            | 1/57            | 1/62            | 1/73            |
| 42                              | 1/35                   | 1/38            | 1/41            | 1/43            | 1/46            | 1/55            |
| 43                              | 1/26                   | 1/29            | 1/30            | 1/32            | 1/35            | 1/41            |
| 44                              | 1/20                   | 1/21            | 1/23            | 1/24            | 1/26            | 1/30            |
| 45                              | 1/15                   | 1/16            | 1/17            | 1/18            | 1/19            | 1/23            |

**Table 2 Risk of trisomy 18 (Snijders et al. Fetal Diag Ther 1995;10:356-67)**

| <b>Maternal age<br/>(years)</b> | <b>Gestational age</b> |                 |                 |                 |                 |                 |
|---------------------------------|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                 | <b>10 weeks</b>        | <b>12 weeks</b> | <b>14 weeks</b> | <b>16 weeks</b> | <b>20 weeks</b> | <b>40 weeks</b> |
| 20                              | 1/1993                 | 1/2484          | 1/3015          | 1/3590          | 1/4897          | 1/18013         |
| 25                              | 1/1765                 | 1/2200          | 1/2670          | 1/3179          | 1/4336          | 1/15951         |
| 30                              | 1/1168                 | 1/1456          | 1/1766          | 1/2103          | 1/2869          | 1/10554         |
| 31                              | 1/1014                 | 1/1263          | 1/1533          | 1/1825          | 1/2490          | 1/9160          |
| 32                              | 1/860                  | 1/1072          | 1/1301          | 1/1549          | 1/2490          | 1/7775          |
| 33                              | 1/715                  | 1/891           | 1/1081          | 1/1287          | 1/1755          | 1/6458          |
| 34                              | 1/582                  | 1/725           | 1/880           | 1/1047          | 1/1429          | 1/5256          |
| 35                              | 1/465                  | 1/580           | 1/703           | 1/837           | 1/1142          | 1/4202          |
| 36                              | 1/366                  | 1/456           | 1/553           | 1/659           | 1/899           | 1/3307          |
| 37                              | 1/284                  | 1/354           | 1/430           | 1/512           | 1/698           | 1/2569          |
| 38                              | 1/218                  | 1/272           | 1/330           | 1/393           | 1/537           | 1/1974          |
| 39                              | 1/167                  | 1/208           | 1/252           | 1/300           | 1/409           | 1/1505          |
| 40                              | 1/126                  | 1/157           | 1/191           | 1/227           | 1/310           | 1/1139          |
| 41                              | 1/95                   | 1/118           | 1/144           | 1/171           | 1/233           | 1/858           |
| 42                              | 1/71                   | 1/89            | 1/108           | 1/128           | 1/175           | 1/644           |
| 43                              | 1/53                   | 1/66            | 1/81            | 1/96            | 1/131           | 1/481           |
| 44                              | 1/40                   | 1/50            | 1/60            | 1/72            | 1/98            | 1/359           |

**Table 3 Risk of trisomy 13 (Snijders et al. Fetal Diag Ther 1995;10:356–67)**

| <b>Maternal age<br/>(years)</b> | <b>Gestational age</b> |                 |                 |                 |                 |                 |
|---------------------------------|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                 | <b>10 weeks</b>        | <b>12 weeks</b> | <b>14 weeks</b> | <b>16 weeks</b> | <b>20 weeks</b> | <b>40 weeks</b> |
| 20                              | 1/6347                 | 1/7826          | 1/9389          | 1/11042         | 1/14656         | 1/42423         |
| 25                              | 1/5621                 | 1/6930          | 1/8314          | 1/9778          | 1/12978         | 1/37567         |
| 30                              | 1/3719                 | 1/4585          | 1/5501          | 1/6470          | 1/8587          | 1/24856         |
| 31                              | 1/3228                 | 1/3980          | 1/4774          | 1/5615          | 1/7453          | 1/21573         |
| 32                              | 1/2740                 | 1/3378          | 1/4052          | 1/4766          | 1/6326          | 1/18311         |
| 33                              | 1/2275                 | 1/2806          | 1/3366          | 1/3959          | 1/5254          | 1/15209         |
| 34                              | 1/1852                 | 1/2284          | 1/2740          | 1/3222          | 1/4277          | 1/12380         |
| 35                              | 1/1481                 | 1/1826          | 1/2190          | 1/2576          | 1/3419          | 1/9876          |
| 36                              | 1/1165                 | 1/1437          | 1/1724          | 1/2027          | 1/2691          | 1/7788          |
| 37                              | 1/905                  | 1/1116          | 1/1339          | 1/1575          | 1/2090          | 1/6050          |
| 38                              | 1/696                  | 1/858           | 1/1029          | 1/1210          | 1/1606          | 1/4650          |
| 39                              | 1/530                  | 1/654           | 1/784           | 1/922           | 1/1224          | 1/3544          |
| 40                              | 1/401                  | 1/495           | 1/594           | 1/698           | 1/927           | 1/2683          |
| 41                              | 1/302                  | 1/373           | 1/447           | 1/526           | 1/698           | 1/2020          |
| 42                              | 1/227                  | 1/280           | 1/335           | 1/395           | 1/524           | 1/1516          |
| 43                              | 1/170                  | 1/209           | 1/251           | 1/295           | 1/392           | 1/1134          |
| 44                              | 1/127                  | 1/156           | 1/187           | 1/220           | 1/292           | 1/846           |

**Appendix II**

# Antenatal sonographic findings in skeletal dysplasias

## **Type of limb shortening**

|                   |                                                |
|-------------------|------------------------------------------------|
| <b>Rhizomelia</b> | Thanatophoric dysplasia                        |
|                   | Atelosteogenesis                               |
|                   | Chondrodysplasia punctata (rhizomelic type)    |
|                   | Diastrophic dysplasia                          |
|                   | Congenital short femur                         |
|                   | Achondroplasia                                 |
| <b>Mesomelia</b>  | Mesomelic dysplasia                            |
|                   | COVESDEM association                           |
|                   | Acromelia                                      |
|                   | Ellis-Van Creveld syndrome                     |
| <b>Micromelia</b> | Achondrogenesis                                |
|                   | Atelosteogenesis                               |
|                   | Short-rib polydactyly syndrome (types I & III) |
|                   | Diastrophic dysplasia                          |
|                   | Fibrochondrogenesis                            |
|                   | Osteogenesis imperfecta (type II)              |
|                   | Kniest dysplasia                               |
|                   | Dyssegmental dysplasia                         |

## **Altered thoracic dimensions**

|                           |                                               |
|---------------------------|-----------------------------------------------|
| <b>Long narrow thorax</b> | Asphyxiating thoracic dysplasia               |
|                           | Ellis Van Creveld syndrome                    |
|                           | Metatropic dysplasia                          |
|                           | Fibrochondrogenesis                           |
|                           | Atelosteogenesis                              |
|                           | Campomelic dysplasia                          |
|                           | Jarcho-Levin syndrome                         |
|                           | Achondrogenesis                               |
|                           | Hypophosphatasia                              |
|                           | Dyssegmental dysplasia                        |
|                           | Cleidocranial dysplasia                       |
| <b>Short thorax</b>       | Osteogenesis imperfecta (type II)             |
|                           | Kniest's dysplasia                            |
|                           | Pena-Shokeir syndrome                         |
|                           | Hypoplastic thorax                            |
|                           | Short-rib polydactyly syndrome (types I & II) |
|                           | Thanatophoric dysplasia                       |
|                           | Cerebro-costo-mandibular syndrome             |
|                           | Cleidocranial dysostosis syndrome             |
|                           | Homozygous achondroplasia                     |
|                           | Melnick-Needles syndrome (osteodysplasty)     |
|                           | Fibrochondrogenesis                           |
|                           | Otopalatodigital syndrome (type II)           |

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**Hand and foot abnormalities**

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|                              |                                                                                                                                                                                                                         |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Postaxial polydactyly</b> | Chondroectodermal dysplasia<br>Short rib-polydactyly syndrome (type I, type III)<br>Asphyxiating thoracic dysplasia<br>Otopalatodigital syndrome<br>Mesomelic dysplasia Werner type (associated with absence of thumbs) |
| <b>Preaxial polydactyly</b>  | Chondroectodermal dysplasia<br>Short-rib polydactyly syndrome type II<br>Carpenter syndrome                                                                                                                             |
| <b>Syndactyly</b>            | Poland syndrome<br>Carpenter syndrome<br>Aper syndrome<br>Otopalatodigital syndrome (type II)<br>Mesomelic dysplasia Werner type<br>TAR syndrome<br>Jarcho-Levin syndrome<br>Roberts syndrome                           |
| <b>Brachydactyly</b>         | Mesomelic dysplasia Robinow type<br>Otopalatodigital syndrome                                                                                                                                                           |
| <b>Hitch-hiker thumb</b>     | Diastrophic dysplasia                                                                                                                                                                                                   |
| <b>Club feet deformity</b>   | Diastrophic dysplasia<br>Osteogenesis imperfecta<br>Kniest's dysplasia<br>Spondyloepiphyseal dysplasia congenita                                                                                                        |

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**Skull and face deformities**

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|                             |                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Large head</b>           | Achondroplasia<br>Achondrogenesis<br>Thanatophoric dysplasia<br>Osteogenesis imperfecta<br>Cleidocranial dysplasia<br>Hypophosphatasia<br>Campomelic syndrome<br>Short rib-polydactyly syndrome (type III)<br>Robinow mesomelic dysplasia<br>Otopalatodigital syndrome                                                                              |
| <b>Clover-leaf skull</b>    | Thanatophoric dysplasia (type II)<br>Campomelic syndrome                                                                                                                                                                                                                                                                                            |
| <b>Other craniostenosis</b> | Apert's syndrome<br>Carpenter syndrome<br>Hypophosphatasia                                                                                                                                                                                                                                                                                          |
| <b>Congenital cataracts</b> | Chondrodysplasia punctata                                                                                                                                                                                                                                                                                                                           |
| <b>Cleft palate</b>         | Asphyxiating thoracic dysplasia<br>Kniest's dysplasia<br>Diastrophic dysplasia<br>Spondyloepiphyseal syndrome<br>Campomelic syndrome<br>Jarcho-Levin syndrome<br>Chondroectodermal dysplasia<br>Short-rib polydactyly syndrome (type II)<br>Metatropic dysplasia<br>Dyssegmental dysplasia<br>Otopalatodigital syndrome type II<br>Roberts syndrome |

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**Skull and face deformities (contd.)**

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**Hypertelorism**

Otopalatodigital syndrome  
Arthrogryposis multiplex congenita  
Larsen's syndrome  
Roberts syndrome  
Cleidocranial dysplasia  
Achondroplasia  
Campomelic dysplasia  
Coffin syndrome  
Klippel-Feil syndrome  
Aper syndrome  
Sprengel's deformity  
Mesomelic dysplasia  
Holt-Oram syndrome

**Micrognathia**

Campomelic dysplasia  
Diastrophic dysplasia  
Otopalatodigital syndrome  
Achondrogenesis  
Mesomelic dysplasia  
Arthrogryposis multiplex congenita  
Nager acrofacial dysostosis  
Oromandibular limb hypogenesis  
Atelosteogenesis

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***Appendix III***

## **Fetal biometry at 14-40 weeks of gestation**

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Table 1    Biparietal diameter

Table 2    Head circumference

Table 3    Anterior cerebral ventricle diameter

Table 4    Posterior cerebral ventricle diameter

Table 5    Anterior cerebral ventricle diameter to hemisphere diameter ratio

Table 6    Posterior cerebral ventricle diameter to hemisphere diameter ratio

Table 7    Transverse cerebellar diameter

Table 8    Cisterna magna diameter

Table 9    Abdominal circumference

Table 10   Head circumference to abdominal circumference ratio

Table 11   Femur length

Table 12   Head circumference to femur length ratio

## Normal Fetal Biometry

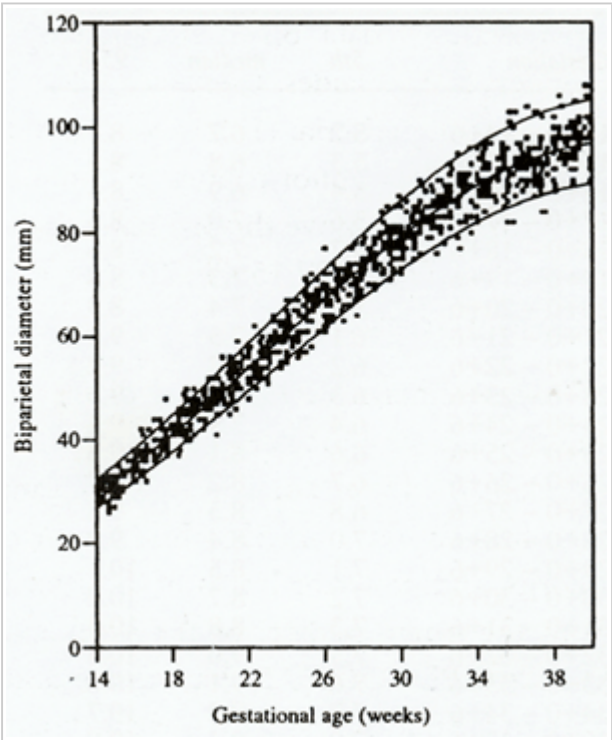
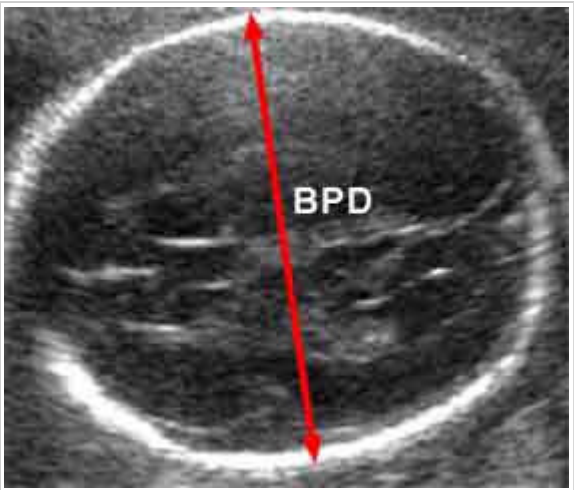
The normal ranges for fetal biometry presented in this section were established from cross-sectional data on 1040 singleton pregnancies at 14–40 weeks of gestation (Snijders & Nicolaides, *Ultrasound Obstet Gynecol* 1994;4:34–48). The patients fulfilled the following criteria: (1) known last menstrual period with a cycle length of 26–30 days, (2) no fetal abnormalities and no pregnancy complications, (3) live birth at term, (4) birth weight above the 3rd and below the 97th centile for gestation (Yudkin et al., *Early Hum Dev* 1987;15:45–52). For each 7-day interval from 14 to 40 weeks, 40 patients were included.

Measurements of biparietal diameter (BPD), occipito-frontal diameter (OFD), anterior and posterior cerebral ventricle diameter (Va and Vp), and hemisphere (H) were obtained from a transverse axial plane of the fetal head showing a central mid-line echo broken in the anterior third by the cavum septii pellucidi and demonstrating the anterior and posterior horns of the lateral ventricles. BPD and OFD were measured from the outer borders of the skull and head circumference (HC) was calculated  $[3.14 \times (BPD + OFD) / 2]$ . Va was the distance between the lateral wall of the anterior horn to the mid-line and Vp was the distance between the medial and lateral walls of the posterior horn. The hemisphere was measured from the mid-line to the inner border of the skull. Transverse cerebellar diameter (TCD) and cisterna magna diameter (CM) were measured in the suboccipitobregmatic plane of the head. The femur length (FL) was measured from the greater trochanter to the lateral condyle. For abdominal circumference (AC), a transverse section of the fetal abdomen was taken at the level of the stomach and the bifurcation of the main portal vein into its right and left branches. The anteroposterior (AD1) and transverse (AD2) diameters were measured and AC was calculated  $[3.14 \times (A) / 2]$ . The following ratios were calculated: HC/AC, HC/FL, Va/H and Vp/H.

For each of the measurements and their ratios, regression analysis was applied examining linear, quadratic and cubic models for the association with gestational age (in days). For those measurements where the standard deviation increased or decreased with gestation, logarithmic or square root transformation was applied to stabilize variance. If the quadratic or cubic terms did not improve the original linear model (an independent correlation with  $p < 0.05$  and improvement of the correlation coefficient), the linear model was chosen as the best fit. Where the quadratic or cubic components did improve the model, they were included in the equation for the regression line. Equations for regression lines on transformed data were used to calculate the mean and residual SD in transformed units. To produce the reference ranges in the original units, the mean and limits of the calculated reference range in transformed units were subjected to anti-logarithmic or power transformation as appropriate.

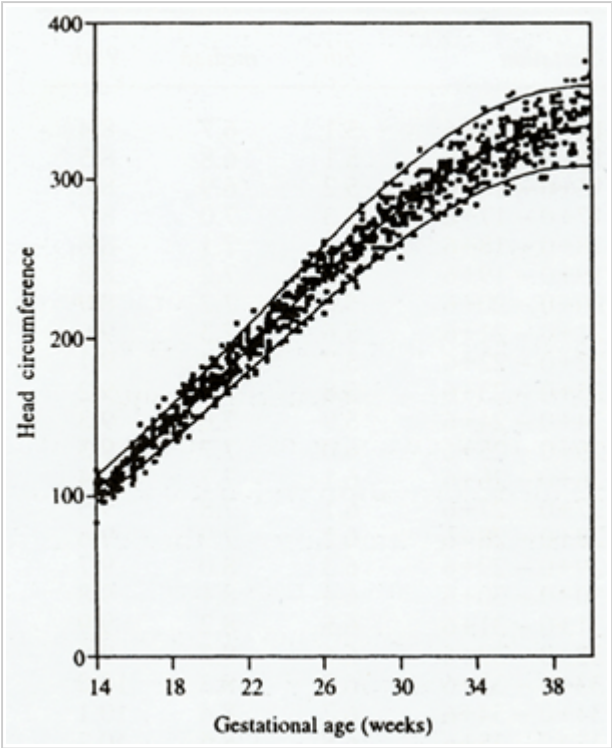
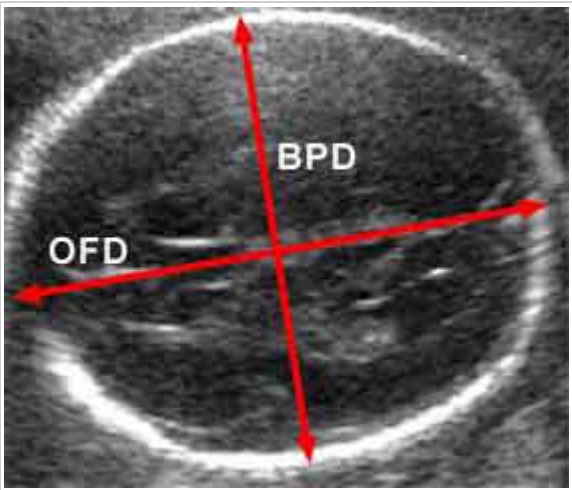
**Table 1    Biparietal diameter (mm)**

| Gestation   | 5th | median | 95th |
|-------------|-----|--------|------|
| 14+0 - 14+6 | 28  | 31     | 34   |
| 15+0 - 15+6 | 31  | 34     | 37   |
| 16+0 - 16+6 | 34  | 37     | 40   |
| 17+0 - 17+6 | 36  | 40     | 43   |
| 18+0 - 18+6 | 39  | 43     | 47   |
| 19+0 - 19+6 | 42  | 46     | 50   |
| 20+0 - 20+6 | 45  | 49     | 54   |
| 21+0 - 21+6 | 48  | 52     | 57   |
| 22+0 - 22+6 | 51  | 56     | 61   |
| 23+0 - 23+6 | 54  | 59     | 64   |
| 24+0 - 24+6 | 57  | 62     | 68   |
| 25+0 - 25+6 | 60  | 66     | 71   |
| 26+0 - 26+6 | 63  | 69     | 75   |
| 27+0 - 27+6 | 66  | 72     | 78   |
| 28+0 - 28+6 | 69  | 75     | 81   |
| 29+0 - 29+6 | 72  | 78     | 85   |
| 30+0 - 30+6 | 74  | 81     | 88   |
| 31+0 - 31+6 | 77  | 83     | 90   |
| 32+0 - 32+6 | 79  | 86     | 93   |
| 33+0 - 33+6 | 81  | 88     | 96   |
| 34+0 - 34+6 | 83  | 90     | 98   |
| 35+0 - 35+6 | 85  | 92     | 100  |
| 36+0 - 36+6 | 86  | 94     | 102  |
| 37+0 - 37+6 | 87  | 95     | 103  |
| 38+0 - 38+6 | 88  | 96     | 104  |
| 39+0 - 39+6 | 89  | 97     | 105  |



**Table 2    Head circumference (mm)**

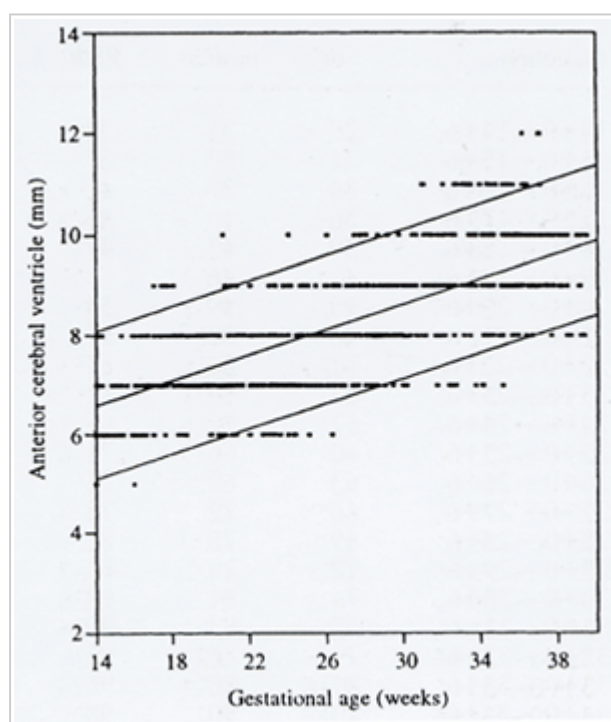
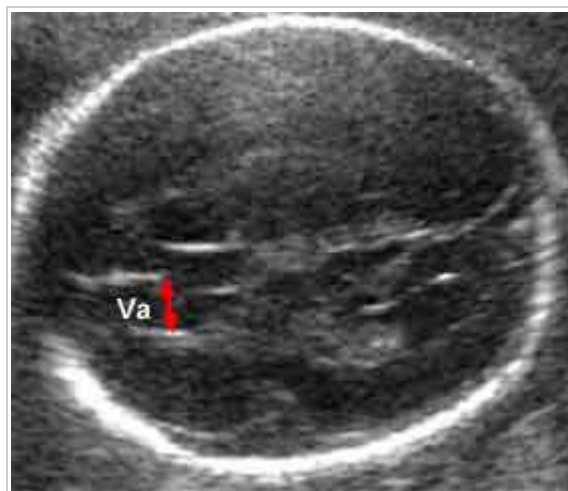
| Gestation   | 5th | median | 95th |
|-------------|-----|--------|------|
| 14+0 - 14+6 | 102 | 110    | 118  |
| 15+0 - 15+6 | 111 | 120    | 129  |
| 16+0 - 16+6 | 120 | 130    | 140  |
| 17+0 - 17+6 | 130 | 141    | 152  |
| 18+0 - 18+6 | 141 | 152    | 164  |
| 19+0 - 19+6 | 151 | 163    | 176  |
| 20+0 - 20+6 | 162 | 175    | 189  |
| 21+0 - 21+6 | 173 | 187    | 201  |
| 22+0 - 22+6 | 184 | 198    | 214  |
| 23+0 - 23+6 | 195 | 210    | 227  |
| 24+0 - 24+6 | 206 | 222    | 240  |
| 25+0 - 25+6 | 217 | 234    | 252  |
| 26+0 - 26+6 | 227 | 245    | 264  |
| 27+0 - 27+6 | 238 | 256    | 277  |
| 28+0 - 28+6 | 248 | 267    | 288  |
| 29+0 - 29+6 | 257 | 277    | 299  |
| 30+0 - 30+6 | 266 | 287    | 309  |
| 31+0 - 31+6 | 274 | 296    | 319  |
| 32+0 - 32+6 | 282 | 304    | 328  |
| 33+0 - 33+6 | 288 | 311    | 336  |
| 34+0 - 34+6 | 294 | 317    | 342  |
| 35+0 - 35+6 | 299 | 323    | 348  |
| 36+0 - 36+6 | 303 | 327    | 353  |
| 37+0 - 37+6 | 306 | 330    | 356  |
| 38+0 - 38+6 | 308 | 332    | 358  |
| 39+0 - 39+6 | 309 | 333    | 359  |



$HC = [3.14 \times (BPD+OFD)/2]$

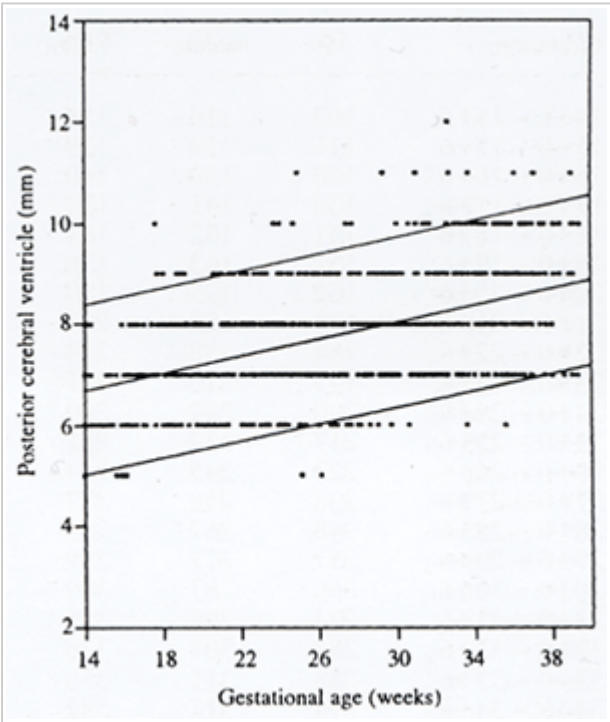
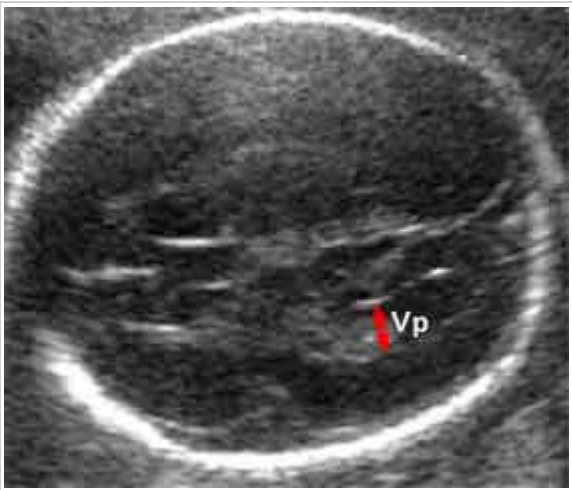
**Table 3**    *Anterior cerebral ventricle diameter (mm)*

| <i>Gestation</i> | <i>5th</i> | <i>median</i> | <i>95th</i> |
|------------------|------------|---------------|-------------|
| 14+0 - 14+6      | 5.2        | 6.7           | 8.1         |
| 15+0 - 15+6      | 5.3        | 6.8           | 8.3         |
| 16+0 - 16+6      | 5.4        | 6.9           | 8.4         |
| 17+0 - 17+6      | 5.6        | 7.0           | 8.5         |
| 18+0 - 18+6      | 5.7        | 7.2           | 8.6         |
| 19+0 - 19+6      | 5.8        | 7.3           | 8.8         |
| 20+0 - 20+6      | 5.9        | 7.4           | 8.9         |
| 21+0 - 21+6      | 6.1        | 7.5           | 9.0         |
| 22+0 - 22+6      | 6.2        | 7.7           | 9.2         |
| 23+0 - 23+6      | 6.3        | 7.8           | 9.3         |
| 24+0 - 24+6      | 6.4        | 7.9           | 9.4         |
| 25+0 - 25+6      | 6.6        | 8.1           | 9.5         |
| 26+0 - 26+6      | 6.7        | 8.2           | 9.7         |
| 27+0 - 27+6      | 6.8        | 8.3           | 9.8         |
| 28+0 - 28+6      | 7.0        | 8.4           | 9.9         |
| 29+0 - 29+6      | 7.1        | 8.5           | 10.1        |
| 30+0 - 30+6      | 7.2        | 8.7           | 10.2        |
| 31+0 - 31+6      | 7.3        | 8.8           | 10.3        |
| 32+0 - 32+6      | 7.5        | 9.0           | 10.4        |
| 33+0 - 33+6      | 7.6        | 9.1           | 10.6        |
| 34+0 - 34+6      | 7.7        | 9.2           | 10.7        |
| 35+0 - 35+6      | 7.9        | 9.3           | 10.8        |
| 36+0 - 36+6      | 8.0        | 9.5           | 10.9        |
| 37+0 - 37+6      | 8.1        | 9.6           | 11.1        |
| 38+0 - 38+6      | 8.2        | 9.7           | 11.2        |
| 39+0 - 39+6      | 8.3        | 9.8           | 11.3        |



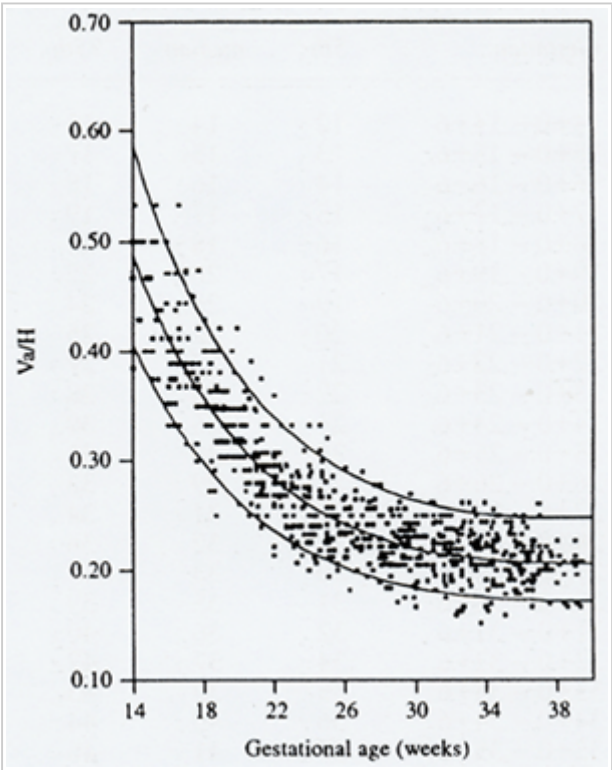
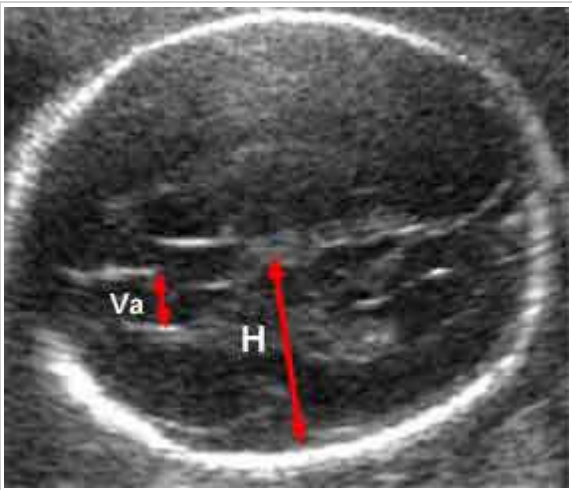
**Table 4    Posterior cerebral ventricle diameter (mm)**

| Gestation   | 5th | median | 95th |
|-------------|-----|--------|------|
| 14+0 - 14+6 | 5.1 | 6.7    | 8.4  |
| 15+0 - 15+6 | 5.1 | 6.8    | 8.5  |
| 16+0 - 16+6 | 5.2 | 6.9    | 8.6  |
| 17+0 - 17+6 | 5.3 | 7.0    | 8.7  |
| 18+0 - 18+6 | 5.4 | 7.1    | 8.8  |
| 19+0 - 19+6 | 5.5 | 7.2    | 8.8  |
| 20+0 - 20+6 | 5.6 | 7.2    | 8.9  |
| 21+0 - 21+6 | 5.6 | 7.3    | 9.0  |
| 22+0 - 22+6 | 5.7 | 7.4    | 9.1  |
| 23+0 - 23+6 | 5.8 | 7.5    | 9.2  |
| 24+0 - 24+6 | 5.9 | 7.6    | 9.3  |
| 25+0 - 25+6 | 6.0 | 7.7    | 9.3  |
| 26+0 - 26+6 | 6.1 | 7.7    | 9.4  |
| 27+0 - 27+6 | 6.1 | 7.8    | 9.5  |
| 28+0 - 28+6 | 6.2 | 7.9    | 9.6  |
| 29+0 - 29+6 | 6.3 | 8.0    | 9.7  |
| 30+0 - 30+6 | 6.4 | 8.1    | 9.8  |
| 31+0 - 31+6 | 6.5 | 8.2    | 9.9  |
| 32+0 - 32+6 | 6.6 | 8.3    | 9.9  |
| 33+0 - 33+6 | 6.7 | 8.3    | 10.0 |
| 34+0 - 34+6 | 6.7 | 8.4    | 10.1 |
| 35+0 - 35+6 | 6.8 | 8.5    | 10.2 |
| 36+0 - 36+6 | 6.9 | 8.6    | 10.3 |
| 37+0 - 37+6 | 7.0 | 8.7    | 10.4 |
| 38+0 - 38+6 | 7.1 | 8.8    | 10.4 |
| 39+0 - 39+6 | 7.2 | 8.8    | 10.5 |



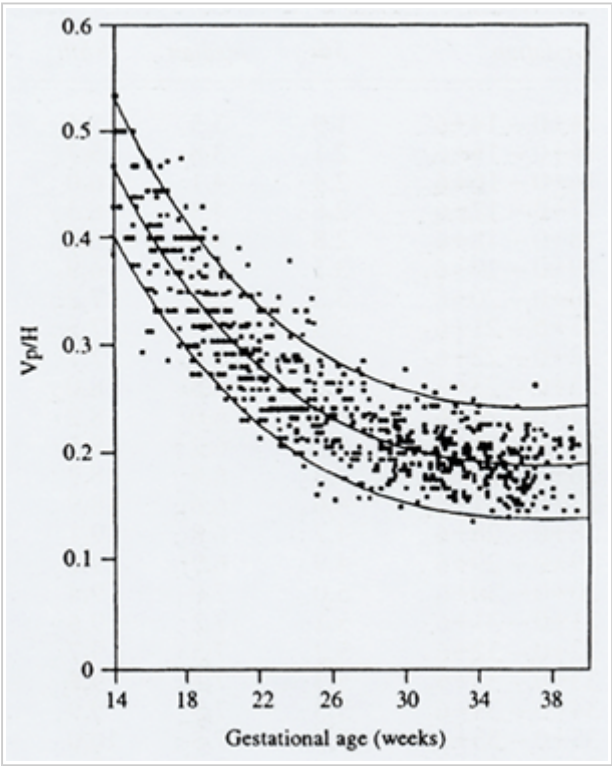
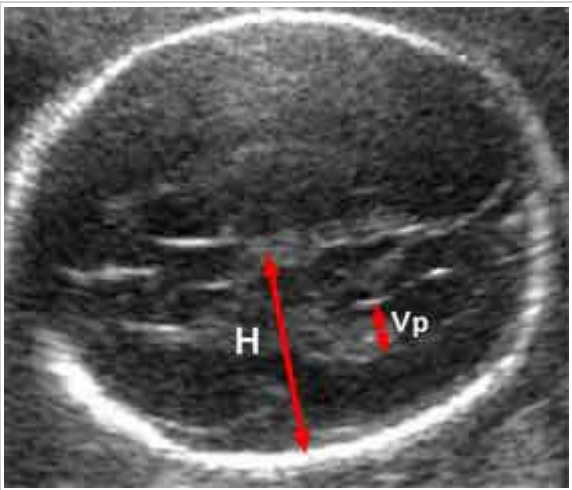
**Table 5    Anterior cerebral ventricle diameter (Va) to hemisphere diameter (H) ratio**

| Gestation   | 5th  | median | 95th |
|-------------|------|--------|------|
| 14+0 - 14+6 | 0.39 | 0.47   | 0.56 |
| 15+0 - 15+6 | 0.36 | 0.43   | 0.51 |
| 16+0 - 16+6 | 0.33 | 0.40   | 0.48 |
| 17+0 - 17+6 | 0.31 | 0.37   | 0.44 |
| 18+0 - 18+6 | 0.29 | 0.35   | 0.41 |
| 19+0 - 19+6 | 0.27 | 0.32   | 0.39 |
| 20+0 - 20+6 | 0.26 | 0.31   | 0.37 |
| 21+0 - 21+6 | 0.24 | 0.29   | 0.35 |
| 22+0 - 22+6 | 0.23 | 0.28   | 0.33 |
| 23+0 - 23+6 | 0.22 | 0.27   | 0.32 |
| 24+0 - 24+6 | 0.21 | 0.26   | 0.31 |
| 25+0 - 25+6 | 0.21 | 0.25   | 0.30 |
| 26+0 - 26+6 | 0.20 | 0.24   | 0.29 |
| 27+0 - 27+6 | 0.19 | 0.23   | 0.28 |
| 28+0 - 28+6 | 0.19 | 0.23   | 0.27 |
| 29+0 - 29+6 | 0.19 | 0.22   | 0.27 |
| 30+0 - 30+6 | 0.18 | 0.22   | 0.26 |
| 31+0 - 31+6 | 0.18 | 0.21   | 0.26 |
| 32+0 - 32+6 | 0.18 | 0.21   | 0.26 |
| 33+0 - 33+6 | 0.18 | 0.21   | 0.25 |
| 34+0 - 34+6 | 0.17 | 0.21   | 0.25 |
| 35+0 - 35+6 | 0.17 | 0.21   | 0.25 |
| 36+0 - 36+6 | 0.17 | 0.21   | 0.25 |
| 37+0 - 37+6 | 0.17 | 0.21   | 0.25 |
| 38+0 - 38+6 | 0.17 | 0.21   | 0.25 |
| 39+0 - 39+6 | 0.17 | 0.21   | 0.25 |



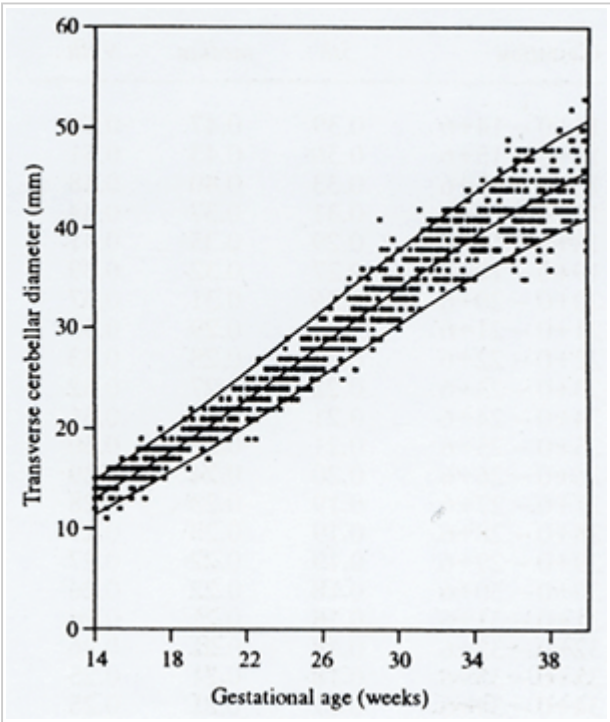
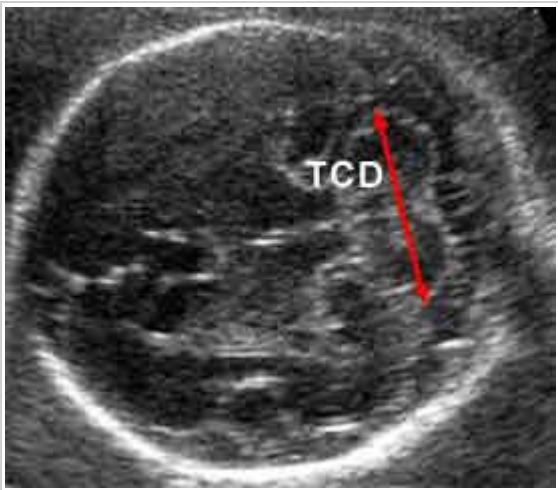
**Table 6    Posterior cerebral ventricle diameter (Vp) to hemisphere diameter (H) ratio**

| Gestation   | 5th  | median | 95th |
|-------------|------|--------|------|
| 14+0 - 14+6 | 0.36 | 0.45   | 0.56 |
| 15+0 - 15+6 | 0.34 | 0.42   | 0.52 |
| 16+0 - 16+6 | 0.31 | 0.39   | 0.48 |
| 17+0 - 17+6 | 0.29 | 0.36   | 0.45 |
| 18+0 - 18+6 | 0.27 | 0.34   | 0.42 |
| 19+0 - 19+6 | 0.26 | 0.32   | 0.40 |
| 20+0 - 20+6 | 0.24 | 0.30   | 0.37 |
| 21+0 - 21+6 | 0.23 | 0.29   | 0.35 |
| 22+0 - 22+6 | 0.22 | 0.27   | 0.34 |
| 23+0 - 23+6 | 0.21 | 0.26   | 0.32 |
| 24+0 - 24+6 | 0.20 | 0.25   | 0.31 |
| 25+0 - 25+6 | 0.19 | 0.24   | 0.29 |
| 26+0 - 26+6 | 0.18 | 0.23   | 0.28 |
| 27+0 - 27+6 | 0.18 | 0.22   | 0.27 |
| 28+0 - 28+6 | 0.17 | 0.21   | 0.26 |
| 29+0 - 29+6 | 0.17 | 0.21   | 0.26 |
| 30+0 - 30+6 | 0.16 | 0.20   | 0.25 |
| 31+0 - 31+6 | 0.16 | 0.20   | 0.24 |
| 32+0 - 32+6 | 0.16 | 0.19   | 0.24 |
| 33+0 - 33+6 | 0.15 | 0.19   | 0.24 |
| 34+0 - 34+6 | 0.15 | 0.19   | 0.24 |
| 35+0 - 35+6 | 0.15 | 0.19   | 0.24 |
| 36+0 - 36+6 | 0.15 | 0.19   | 0.24 |
| 37+0 - 37+6 | 0.15 | 0.19   | 0.24 |
| 38+0 - 38+6 | 0.15 | 0.19   | 0.24 |
| 39+0 - 39+6 | 0.15 | 0.19   | 0.24 |



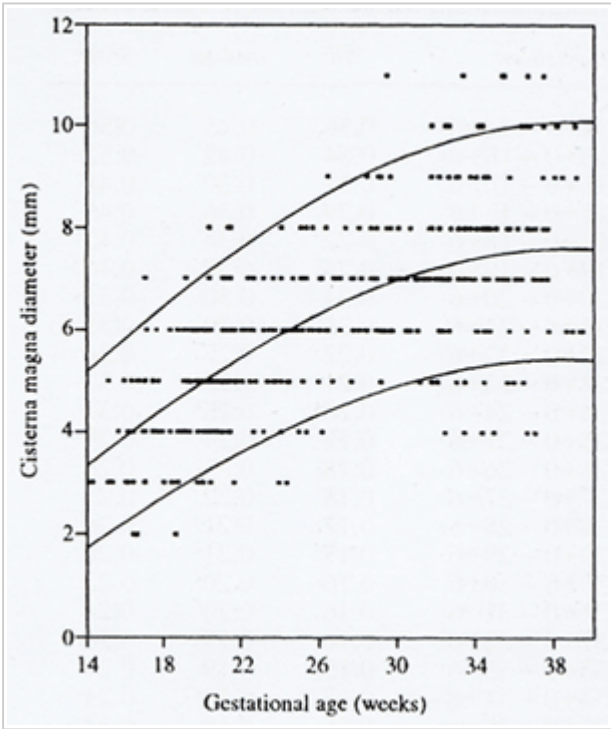
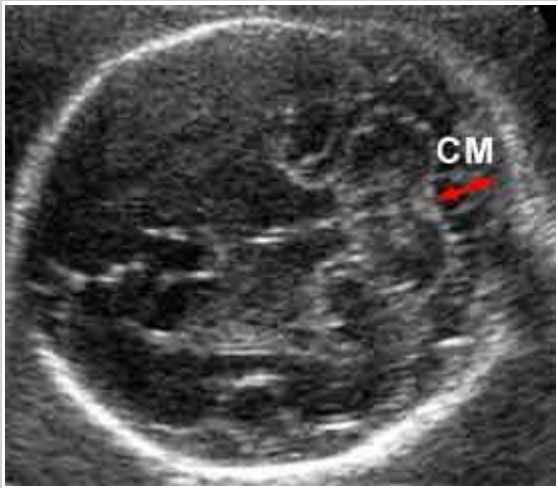
**Table 7    Transverse cerebellar diameter (mm)**

| Gestation   | 5th | median | 95th |
|-------------|-----|--------|------|
| 14+0 - 14+6 | 12  | 14     | 15   |
| 15+0 - 15+6 | 13  | 15     | 17   |
| 16+0 - 16+6 | 14  | 16     | 18   |
| 17+0 - 17+6 | 15  | 17     | 19   |
| 18+0 - 18+6 | 16  | 18     | 21   |
| 19+0 - 19+6 | 17  | 20     | 22   |
| 20+0 - 20+6 | 19  | 21     | 24   |
| 21+0 - 21+6 | 20  | 22     | 25   |
| 22+0 - 22+6 | 21  | 24     | 27   |
| 23+0 - 23+6 | 22  | 25     | 28   |
| 24+0 - 24+6 | 24  | 26     | 30   |
| 25+0 - 25+6 | 25  | 28     | 31   |
| 26+0 - 26+6 | 26  | 29     | 33   |
| 27+0 - 27+6 | 27  | 31     | 34   |
| 28+0 - 28+6 | 29  | 32     | 36   |
| 29+0 - 29+6 | 30  | 33     | 37   |
| 30+0 - 30+6 | 31  | 35     | 39   |
| 31+0 - 31+6 | 32  | 36     | 40   |
| 32+0 - 32+6 | 34  | 37     | 42   |
| 33+0 - 33+6 | 35  | 39     | 43   |
| 34+0 - 34+6 | 36  | 40     | 44   |
| 35+0 - 35+6 | 37  | 41     | 46   |
| 36+0 - 36+6 | 38  | 42     | 47   |
| 37+0 - 37+6 | 39  | 43     | 48   |
| 38+0 - 38+6 | 40  | 44     | 49   |
| 39+0 - 39+6 | 41  | 45     | 51   |



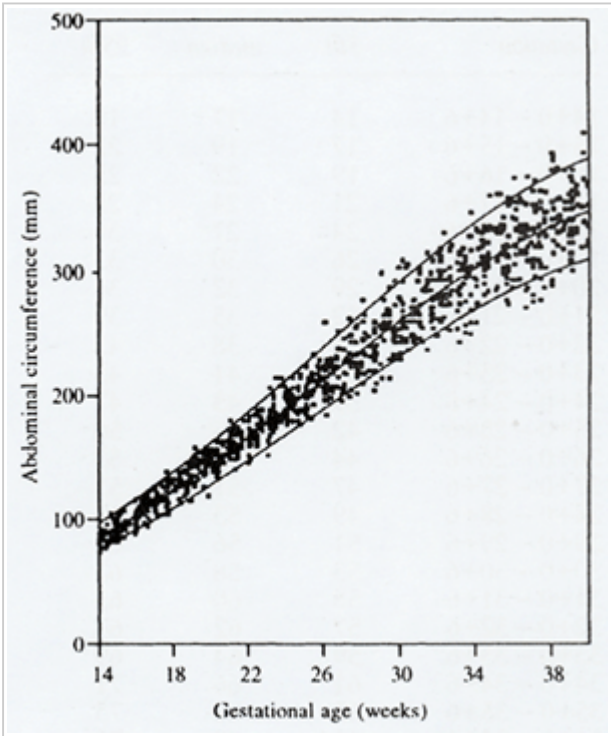
**Table 8**     *Cisterna magna diameter (mm)*

| <i>Gestation</i> | <i>5th</i> | <i>median</i> | <i>95th</i> |
|------------------|------------|---------------|-------------|
| 14+0 - 14+6      | 1.9        | 3.5           | 5.3         |
| 15+0 - 15+6      | 2.1        | 3.8           | 5.7         |
| 16+0 - 16+6      | 2.4        | 4.1           | 6.0         |
| 17+0 - 17+6      | 2.6        | 4.3           | 6.3         |
| 18+0 - 18+6      | 2.8        | 4.6           | 6.6         |
| 19+0 - 19+6      | 3.1        | 4.9           | 6.9         |
| 20+0 - 20+6      | 3.3        | 5.1           | 7.2         |
| 21+0 - 21+6      | 3.5        | 5.4           | 7.5         |
| 22+0 - 22+6      | 3.7        | 5.6           | 7.7         |
| 23+0 - 23+6      | 3.9        | 5.8           | 8.0         |
| 24+0 - 24+6      | 4.1        | 6.0           | 8.2         |
| 25+0 - 25+6      | 4.3        | 6.2           | 8.5         |
| 26+0 - 26+6      | 4.4        | 6.4           | 8.7         |
| 27+0 - 27+6      | 4.6        | 6.6           | 8.9         |
| 28+0 - 28+6      | 4.7        | 6.8           | 9.1         |
| 29+0 - 29+6      | 4.9        | 6.9           | 9.3         |
| 30+0 - 30+6      | 5.0        | 7.0           | 9.4         |
| 31+0 - 31+6      | 5.1        | 7.2           | 9.6         |
| 32+0 - 32+6      | 5.2        | 7.3           | 9.7         |
| 33+0 - 33+6      | 5.3        | 7.4           | 9.8         |
| 34+0 - 34+6      | 5.3        | 7.5           | 9.9         |
| 35+0 - 35+6      | 5.4        | 7.5           | 10.0        |
| 36+0 - 36+6      | 5.4        | 7.6           | 10.0        |
| 37+0 - 37+6      | 5.4        | 7.6           | 10.1        |
| 38+0 - 38+6      | 5.5        | 7.6           | 10.1        |
| 39+0 - 39+6      | 5.5        | 7.6           | 10.1        |



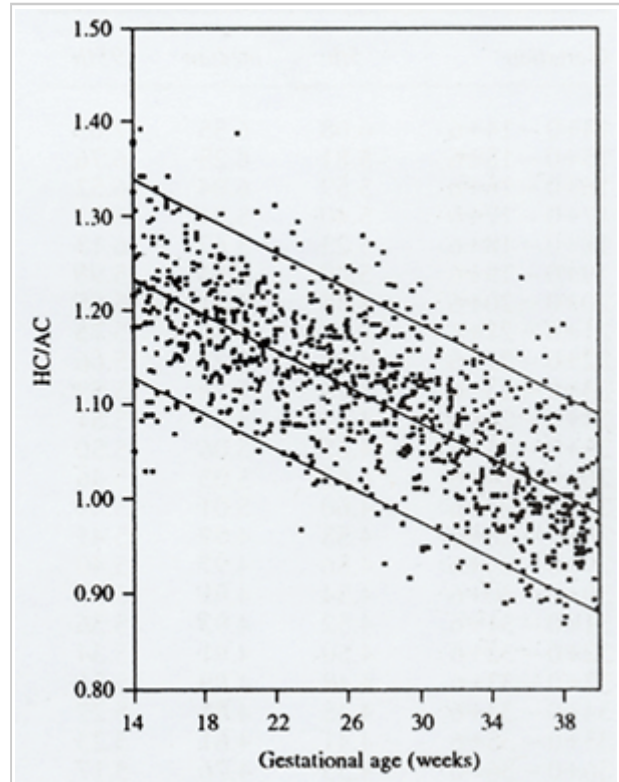
**Table 9     Abdominal circumference (mm)**

| <i>Gestation</i> | <i>5th</i> | <i>median</i> | <i>95th</i> |
|------------------|------------|---------------|-------------|
| 14+0 - 14+6      | 80         | 90            | 102         |
| 15+0 - 15+6      | 88         | 99            | 112         |
| 16+0 - 16+6      | 96         | 108           | 122         |
| 17+0 - 17+6      | 105        | 118           | 133         |
| 18+0 - 18+6      | 114        | 128           | 144         |
| 19+0 - 19+6      | 123        | 139           | 156         |
| 20+0 - 20+6      | 133        | 149           | 168         |
| 21+0 - 21+6      | 143        | 161           | 181         |
| 22+0 - 22+6      | 153        | 172           | 193         |
| 23+0 - 23+6      | 163        | 183           | 206         |
| 24+0 - 24+6      | 174        | 195           | 219         |
| 25+0 - 25+6      | 184        | 207           | 233         |
| 26+0 - 26+6      | 195        | 219           | 246         |
| 27+0 - 27+6      | 205        | 231           | 259         |
| 28+0 - 28+6      | 216        | 243           | 272         |
| 29+0 - 29+6      | 226        | 254           | 285         |
| 30+0 - 30+6      | 237        | 266           | 298         |
| 31+0 - 31+6      | 246        | 277           | 310         |
| 32+0 - 32+6      | 256        | 287           | 322         |
| 33+0 - 33+6      | 265        | 297           | 334         |
| 34+0 - 34+6      | 274        | 307           | 345         |
| 35+0 - 35+6      | 282        | 316           | 355         |
| 36+0 - 36+6      | 289        | 324           | 364         |
| 37+0 - 37+6      | 295        | 332           | 372         |
| 38+0 - 38+6      | 302        | 339           | 380         |
| 39+0 - 39+6      | 307        | 345           | 387         |



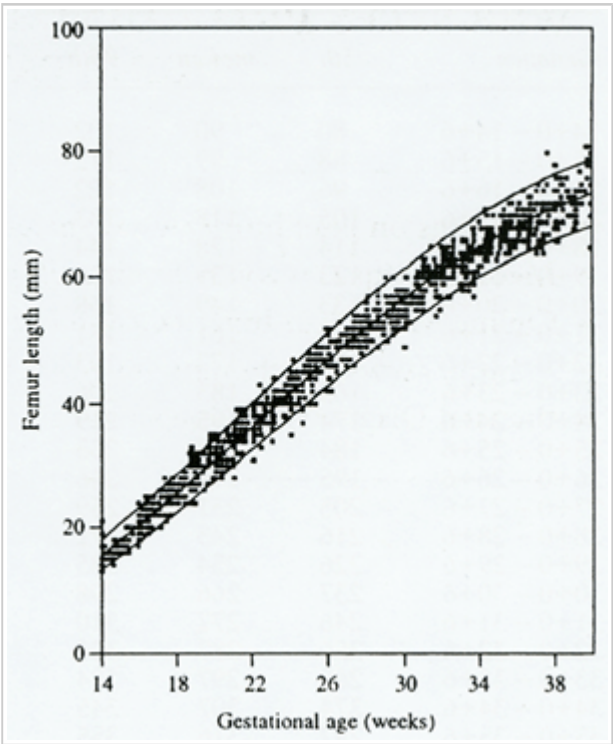
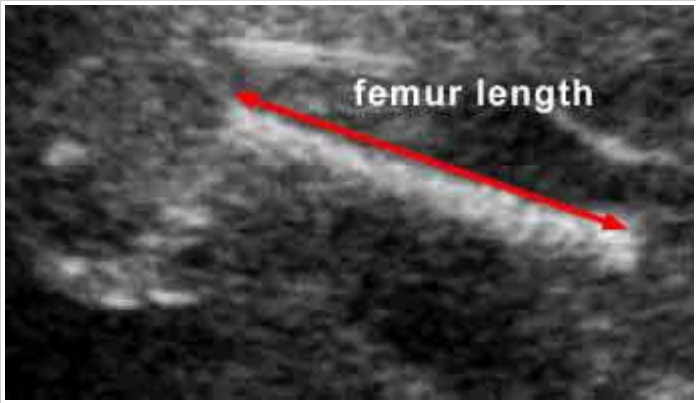
**Table 10 Head circumference (HC) to abdominal circumference (AC) ratio**

| Gestation   | 5th  | median | 95th |
|-------------|------|--------|------|
| 14+0 - 14+6 | 1.12 | 1.23   | 1.33 |
| 15+0 - 15+6 | 1.11 | 1.22   | 1.32 |
| 16+0 - 16+6 | 1.10 | 1.21   | 1.31 |
| 17+0 - 17+6 | 1.09 | 1.20   | 1.30 |
| 18+0 - 18+6 | 1.09 | 1.19   | 1.29 |
| 19+0 - 19+6 | 1.08 | 1.18   | 1.29 |
| 20+0 - 20+6 | 1.07 | 1.17   | 1.28 |
| 21+0 - 21+6 | 1.06 | 1.16   | 1.27 |
| 22+0 - 22+6 | 1.05 | 1.15   | 1.26 |
| 23+0 - 23+6 | 1.04 | 1.14   | 1.25 |
| 24+0 - 24+6 | 1.03 | 1.13   | 1.24 |
| 25+0 - 25+6 | 1.02 | 1.12   | 1.23 |
| 26+0 - 26+6 | 1.01 | 1.11   | 1.22 |
| 27+0 - 27+6 | 1.00 | 1.10   | 1.21 |
| 28+0 - 28+6 | 0.99 | 1.09   | 1.20 |
| 29+0 - 29+6 | 0.98 | 1.08   | 1.19 |
| 30+0 - 30+6 | 0.97 | 1.08   | 1.18 |
| 31+0 - 31+6 | 0.96 | 1.07   | 1.17 |
| 32+0 - 32+6 | 0.95 | 1.06   | 1.16 |
| 33+0 - 33+6 | 0.94 | 1.05   | 1.15 |
| 34+0 - 34+6 | 0.93 | 1.04   | 1.14 |
| 35+0 - 35+6 | 0.92 | 1.03   | 1.13 |
| 36+0 - 36+6 | 0.91 | 1.02   | 1.12 |
| 37+0 - 37+6 | 0.90 | 1.01   | 1.11 |
| 38+0 - 38+6 | 0.89 | 1.00   | 1.10 |
| 39+0 - 39+6 | 0.88 | 0.99   | 1.09 |



**Table 11    Femur length (mm)**

| Gestation   | 5th | median | 95th |
|-------------|-----|--------|------|
| 14+0 - 14+6 | 14  | 17     | 19   |
| 15+0 - 15+6 | 17  | 19     | 22   |
| 16+0 - 16+6 | 19  | 22     | 25   |
| 17+0 - 17+6 | 21  | 24     | 28   |
| 18+0 - 18+6 | 24  | 27     | 30   |
| 19+0 - 19+6 | 26  | 30     | 33   |
| 20+0 - 20+6 | 29  | 32     | 36   |
| 21+0 - 21+6 | 32  | 35     | 39   |
| 22+0 - 22+6 | 34  | 38     | 42   |
| 23+0 - 23+6 | 37  | 41     | 45   |
| 24+0 - 24+6 | 39  | 43     | 47   |
| 25+0 - 25+6 | 42  | 46     | 50   |
| 26+0 - 26+6 | 44  | 48     | 53   |
| 27+0 - 27+6 | 47  | 51     | 55   |
| 28+0 - 28+6 | 49  | 53     | 58   |
| 29+0 - 29+6 | 51  | 56     | 60   |
| 30+0 - 30+6 | 53  | 58     | 63   |
| 31+0 - 31+6 | 55  | 60     | 65   |
| 32+0 - 32+6 | 57  | 62     | 67   |
| 33+0 - 33+6 | 59  | 64     | 69   |
| 34+0 - 34+6 | 61  | 66     | 71   |
| 35+0 - 35+6 | 63  | 68     | 73   |
| 36+0 - 36+6 | 64  | 69     | 74   |
| 37+0 - 37+6 | 66  | 71     | 76   |
| 38+0 - 38+6 | 67  | 72     | 77   |
| 39+0 - 39+6 | 68  | 73     | 78   |



**Table 12 Head circumference (HC) to femur length (FL) ratio**

| Gestation   | 5th  | median | 95th |
|-------------|------|--------|------|
| 14+0 - 14+6 | 6.08 | 6.55   | 7.05 |
| 15+0 - 15+6 | 5.81 | 6.28   | 6.76 |
| 16+0 - 16+6 | 5.59 | 6.04   | 6.52 |
| 17+0 - 17+6 | 5.40 | 5.84   | 6.31 |
| 18+0 - 18+6 | 5.23 | 5.67   | 6.13 |
| 19+0 - 19+6 | 5.09 | 5.53   | 5.98 |
| 20+0 - 20+6 | 4.98 | 5.41   | 5.85 |
| 21+0 - 21+6 | 4.88 | 5.31   | 5.75 |
| 22+0 - 22+6 | 4.80 | 5.22   | 5.66 |
| 23+0 - 23+6 | 4.74 | 5.16   | 5.59 |
| 24+0 - 24+6 | 4.69 | 5.11   | 5.54 |
| 25+0 - 25+6 | 4.65 | 5.06   | 5.50 |
| 26+0 - 26+6 | 4.62 | 5.03   | 5.46 |
| 27+0 - 27+6 | 4.60 | 5.01   | 5.44 |
| 28+0 - 28+6 | 4.58 | 4.99   | 5.41 |
| 29+0 - 29+6 | 4.56 | 4.97   | 5.40 |
| 30+0 - 30+6 | 4.54 | 4.95   | 5.38 |
| 31+0 - 31+6 | 4.52 | 4.93   | 5.36 |
| 32+0 - 32+6 | 4.50 | 4.91   | 5.34 |
| 33+0 - 33+6 | 4.48 | 4.89   | 5.31 |
| 34+0 - 34+6 | 4.45 | 4.85   | 5.27 |
| 35+0 - 35+6 | 4.41 | 4.81   | 5.23 |
| 36+0 - 36+6 | 4.35 | 4.76   | 5.17 |
| 37+0 - 37+6 | 4.29 | 4.69   | 5.11 |
| 38+0 - 38+6 | 4.21 | 4.61   | 5.02 |
| 39+0 - 39+6 | 4.12 | 4.51   | 4.92 |

