

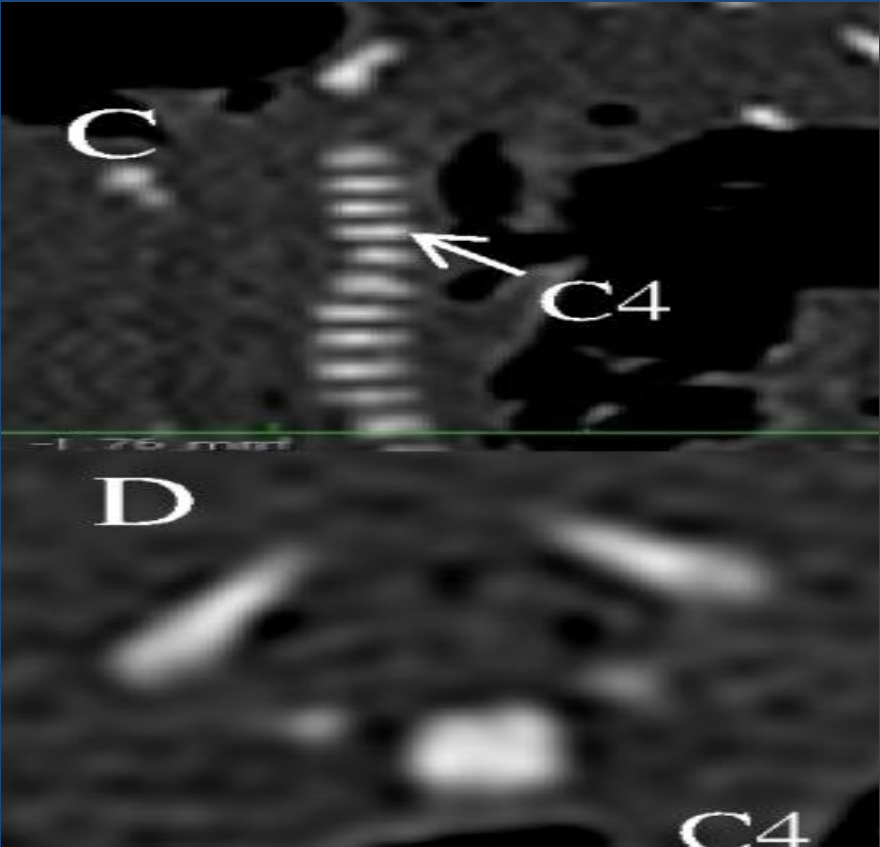
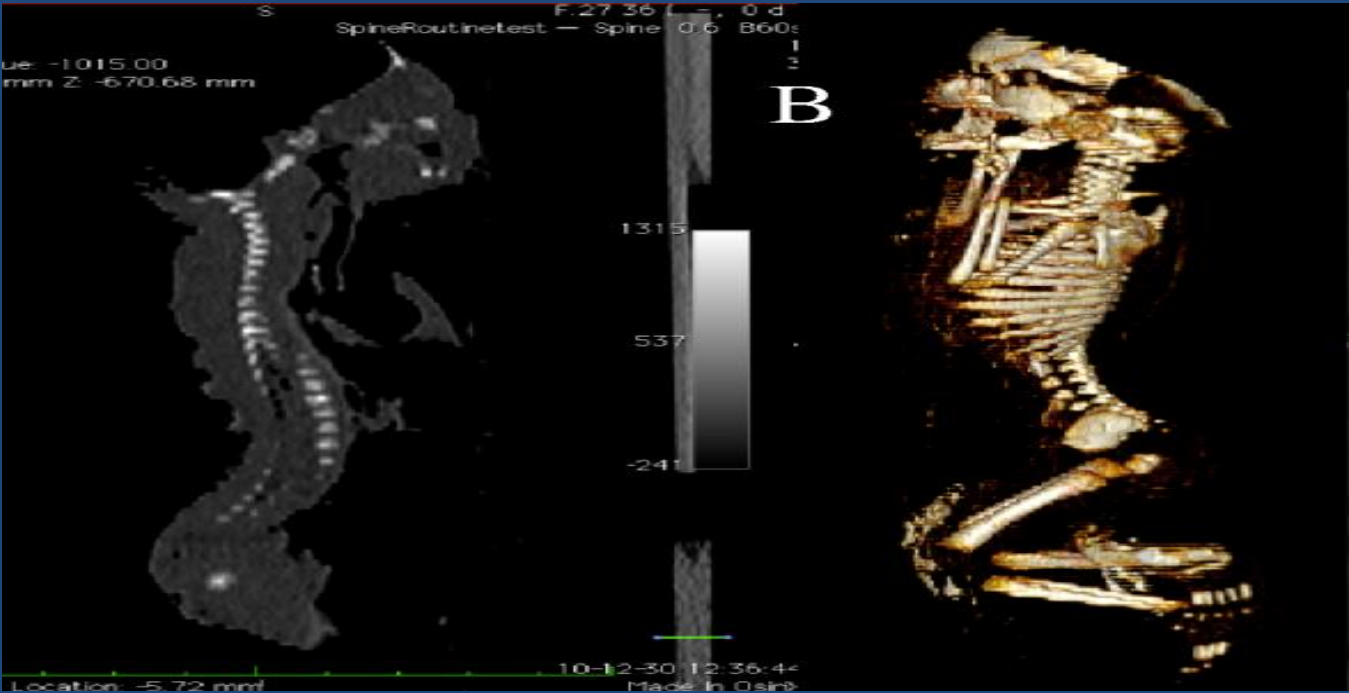
Mariusz Baumgart¹, Michał Szpinda¹, Anna Szpinda¹,
Marcin Wiśniewski¹, Piotr Flisiński¹,
Gabriela Elminowska-Wenda¹, Małgorzata Dombek¹

NEW ANATOMICAL GROWTH PATTERNS OF THE FETAL C4 VERTEBRA

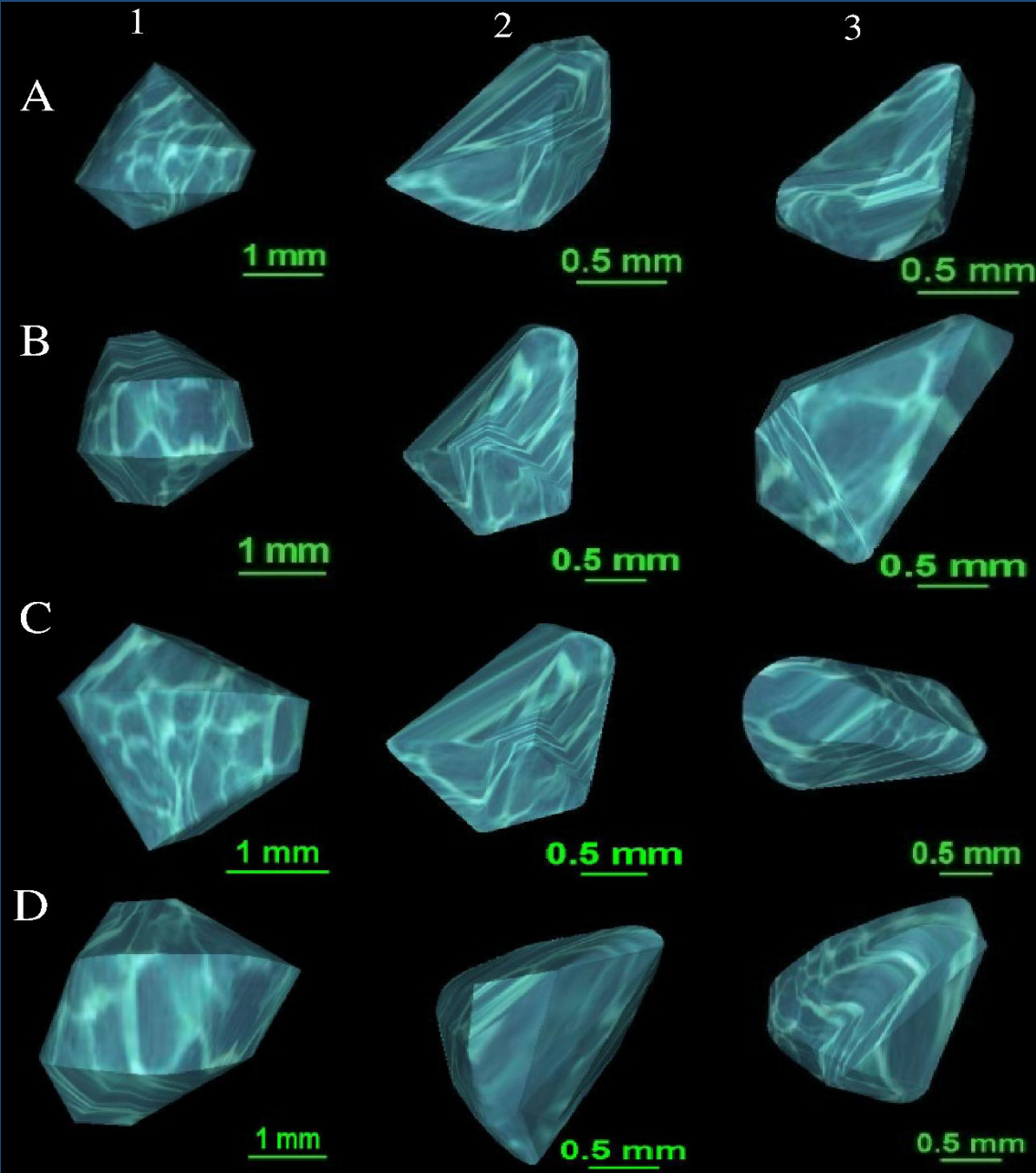
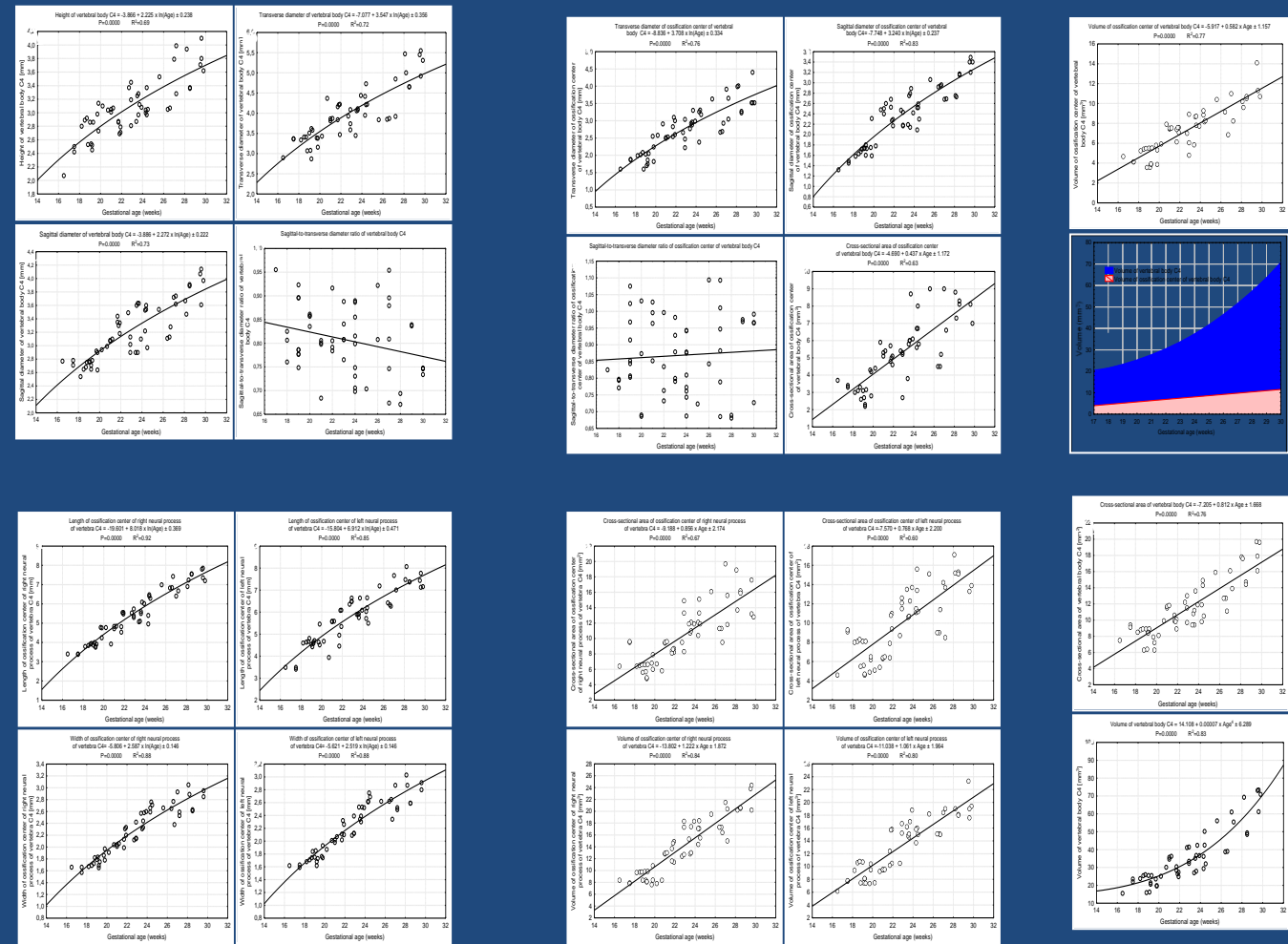
¹Department of Normal Anatomy, ²Department of Medical Biology, Ludwik Rydygier Collegium Medicum in Bydgoszcz, Nicolaus Copernicus University in Toruń

Material and Methods:

With the use of CT, digital-image analysis and statistical analysis the normative growth of vertebra C4 and its three ossification centers in 55 spontaneously aborted human fetuses (27 ♂, 28 ♀) aged 17-30 weeks was examined.



Results:



Conclusions:

1. The morphometric parameters of the C4 vertebra and its three ossification centers show no sex differences.
2. The C4 vertebral body increases logarithmically in height and both sagittal and transverse diameters, linearly in cross-sectional area, and four-degree polynomially in volume.
3. The three ossification centers of the C4 vertebra grow logarithmically in both transverse and sagittal diameters, and linearly in both cross-sectional area and volume. The age-specific reference intervals for the evolving C4 vertebra may be useful in the prenatal diagnosis of congenital spinal defects.