

Morphological observations and morphometric analysis in three human fetuses with bilateral cervical cystic hygroma

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SUMMARY

Three human fetuses (crown-rump length, CRL, ranging from 71 to 77 mm), presenting bilateral cervical cystic hygroma were examined. The specimens were cleared and double-stained with alcian blue and alizarin red S for detecting the ossification growth patterns in the vertebral column, ribs, ischium, limbs, and face. Longitudinal measurements of some long bones in the upper (humerus, ulna, radius) and lower (femur, tibia, fibula) limb were taken. The values of both the total length (TL) and the ossified part (OL) of each long bone, as well as the OL/TL per cent ratio were considered. Reference points were located on the mandible, i.e. condylar process (Pcl), coronoid process (Pco), gnathion (GN), gonion (GO), inferior interdentary point (IDI) for measuring linear dimensions. All values obtained were related with those relative to a group of fetuses, without any detectable malformation and chromosomal abnormalities, with CRL mean value 75 mm, in order to assess the presence of further anomalies, besides the cystic hygroma, in the three fetuses considered.