OP7 CRANIOFACIAL MORPHOLOGY OF YOUNG PATIENTS WITH CONGENITAL OR EARLY ONSET OF MYOTONIC DYSTROPHY

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AIMS: To determine the craniofacial morphology of children and adolescents with congenital or early onset of myotonic dystrophy and its changes over a period of time, by comparing them with healthy subjects.

SUBJECTS AND METHOD: Participants in this study were all young patients diagnosed with myotonic dystrophy from the west and south regions of Sweden. Lateral cephalograms, at two different occasions, were taken with a 5 years interval from 36 subjects suffering from myotonic dystrophy. Analysis of the cephalograms was performed and compared with age and gender matched healthy individuals. Statistical analyses were performed to test the normality of data distribution. Paired *t*-tests were used to detect differences between measurements of cephalogram analysis ($P < 0.05$).

RESULTS: In the initial registrations myotonic dystrophy patients showed, in the sagittal plane, a larger SNA angle, a smaller SNB and SNPg angles and a larger ANB angle. In the vertical plane, ML/NSL and ML/NL were larger. During the 5-year follow-up, these values remained the same or became worse when compared to controls, thus, SNPg decreased by 1.1degrees (±3.1°; $P \leq 0.05$), the intermaxilary angle ML/NL was increased by 1.6 degrees (±4.2°; $P \leq 0.05$), and the gonial angle was increased by 2.7 degrees (±7.5°; $P \leq 0.05$).

CONCLUSION: Children and adolescents suffering from myotonic dystrophy, when compared to healthy individuals, in the sagittal plane, have a more retrognathic profile that increases over time. In the vertical plane, they have a hyperdivergent skeletal aberration with a large intermaxilary angle and a steep mandibular plane, which becomes more severe over time.