

Anthropometric Findings from Birth to Adulthood and Their Relation with Karyotype Distribution in Turkish Girls with Turner Syndrome

¹Erkan Sarı, ²Abdullah Bereket, ¹Ediz Yeşilkaya, ³Firdevs Baş, ³Rüveyde Bundak, ³Banu Küçükemre Aydın, ⁴Şükran Darcan, ⁵Bumin Dünder, ⁶Muammer Büyükinan, ⁷Cengiz Kara, ⁸Erdal Adal, ⁹Ayşehan Akıncı, ¹⁰Mehmet Emre Atabek, ¹¹Fatma Demirel, ¹²Nurullah Çelik, ¹³Behzat Özkan, ¹⁴Bayram Özhan, ¹⁵Zerrin Orbak, ¹⁶Betül Ersoy, ¹⁷Murat Doğan, ¹⁸Ali Ataş, ²Serap Turan, ⁴Damla Gökşen, ¹⁹Ömer Tarım, ²⁰Bilgin Yüksel, ²¹Oya Ercan, ²²Şükrü Hatun, ²³Enver Şimşek, ²⁴Ayşenur Ökten, ²⁵Ayhan Abacı, ¹⁵Hakan Döneray, ²⁶Mehmet Nuri Özbek, ²⁷Mehmet Keskin, ⁸Hasan Önal, ¹⁰Nesibe Akyürek, ¹⁷Kezban Bulan, ¹¹Derya Tepe, ¹²Hamdi Cihan Emeksiz, ¹³Korcan Demir, ¹⁶Deniz Kızılay, ²⁰Ali Kemal Topaloğlu, ¹⁹Erdal Eren, ⁴Samim Özen, ²⁶Hüseyin Demirel, ²Saygın Abalı, ⁸Leyla Akın, ¹⁰Beray Selver Eklioğlu, ¹⁷Sultan Kaba, ²⁵Ahmet Anık, ²Serpil Baş, ⁸Tolga Ünüvar, ¹⁹Halil Sağlam, ²⁸Semih Bolu, ⁸Tolga Özgen, ¹⁹Durmuş Doğan, ¹⁹Esra Deniz Çakır, ²⁹Yaşar Şen, ^{11,30}Nesibe Andiran, ²²Filiz Çizmecioglu, ²¹Olcay Evliyaoğlu, ²⁴Gülay Karagüzel, ³¹Özgür Pirgon, ²⁵Gönül Çatlı, ¹⁹Hatice Dilek Can, ²⁰Fatih Gürbüz, ²³Çiğdem Binay, ³²Veysel Nijat Baş, ¹Kürşat Fidancı, ¹Davut Gül, ¹Adem Polat, ¹Cengizhan Acikel, ¹²Peyami Cinaz, ³Feyza Darendeliler

Pediatric Endocrinology Departments of ¹Gulhane Military Medicine Academy, ²Marmara University Faculty of Medicine, ³Istanbul University Istanbul Faculty of Medicine, ⁴Ege University Faculty of Medicine, ⁵İzmir Katip Çelebi University Faculty of Medicine, ⁶Konya Training and Research Hospital, ⁷19 Mayıs University Faculty of Medicine, ⁸Kanuni Sultan Süleyman University Faculty of Medicine, ⁹İnönü University Faculty of Medicine, ¹⁰Necmettin Erbakan University Faculty of Medicine, ¹¹Yıldırım Beyazıt University, ¹²Gazi University Faculty of Medicine, ¹³Dr. Behçet Uz Children Hospital, ¹⁴Pamukkale University Faculty of Medicine, ¹⁵Atatürk University Faculty of Medicine, ¹⁶Celal Bayar University Faculty of Medicine, ¹⁷Yüzüncü Yıl University Faculty of Medicine, ¹⁸Harran University Faculty of Medicine, ¹⁹Uludağ University Faculty of Medicine, ²⁰Çukurova University Faculty of Medicine, ²¹Istanbul University Cerrahpaşa Faculty of Medicine, ²²Kocaeli University Faculty of Medicine, ²³Osmangazi University Faculty of Medicine, ²⁴Karadeniz Technical University Faculty of Medicine, ²⁵Eylül University Faculty of Medicine, ²⁶Diyarbakır Training and Research Hospital, ²⁷Gaziantep University Faculty of Medicine, ²⁸Düzce University Faculty of Medicine, ²⁹Selçuk University Faculty of Medicine, ³⁰Keçiören Training and Research Hospital, ³¹Süleyman Demirel University Faculty of Medicine, ³²Sami Ulus Children Hospital, TURKEY

OBJECTIVES

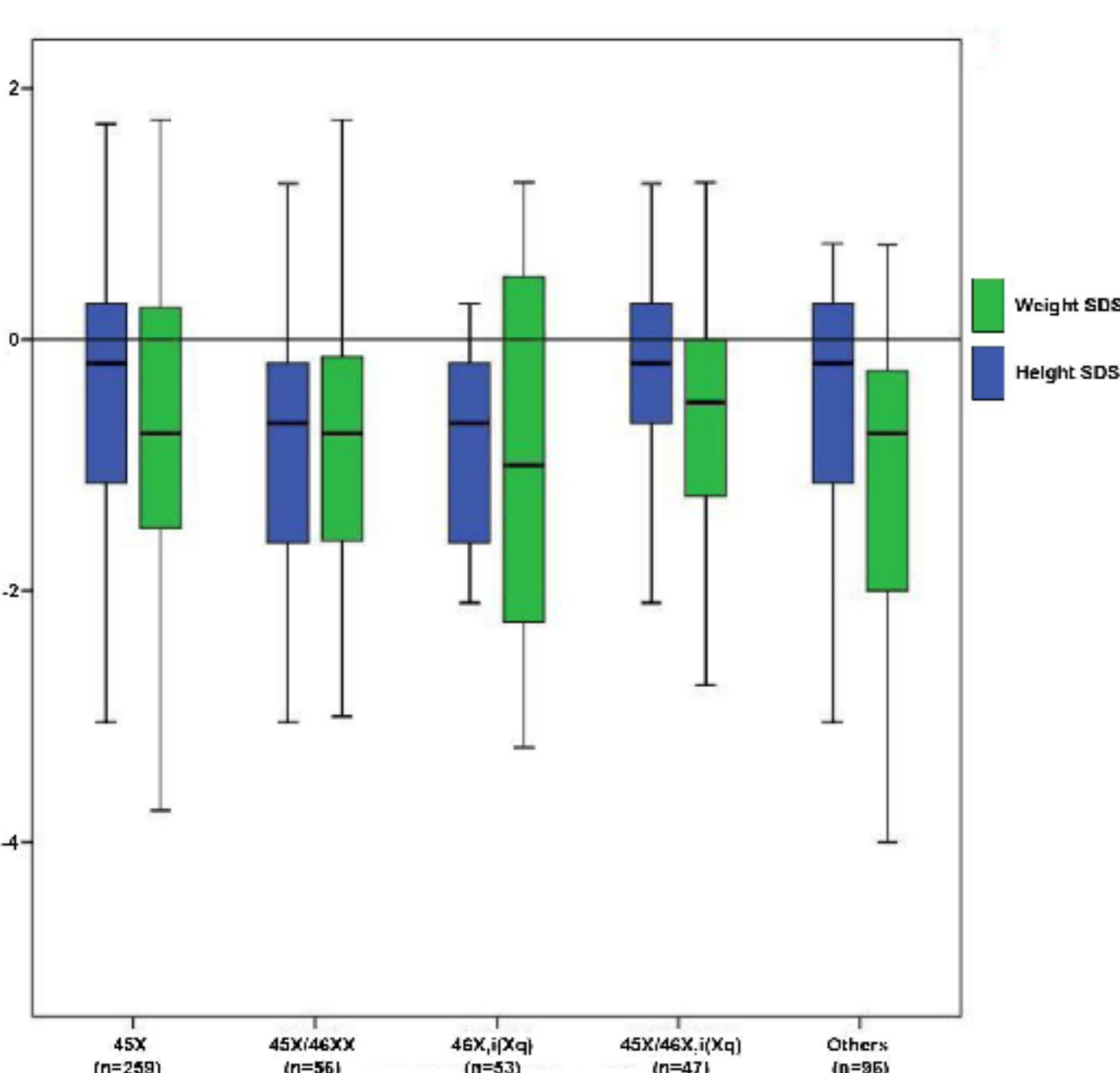
The study aims to evaluate anthropometric features of girls with Turner syndrome (TS) at birth and presentation and effect of karyotype.

METHODS

Data of 842 TS patients, with an age of diagnosis ranging from birth to 18 years followed-up between 1984 and 2014, from 35 different centers were collected. Of those 122 girls who received growth hormone, estrogen or oxandrolone were excluded and 720 girls were included in the study.

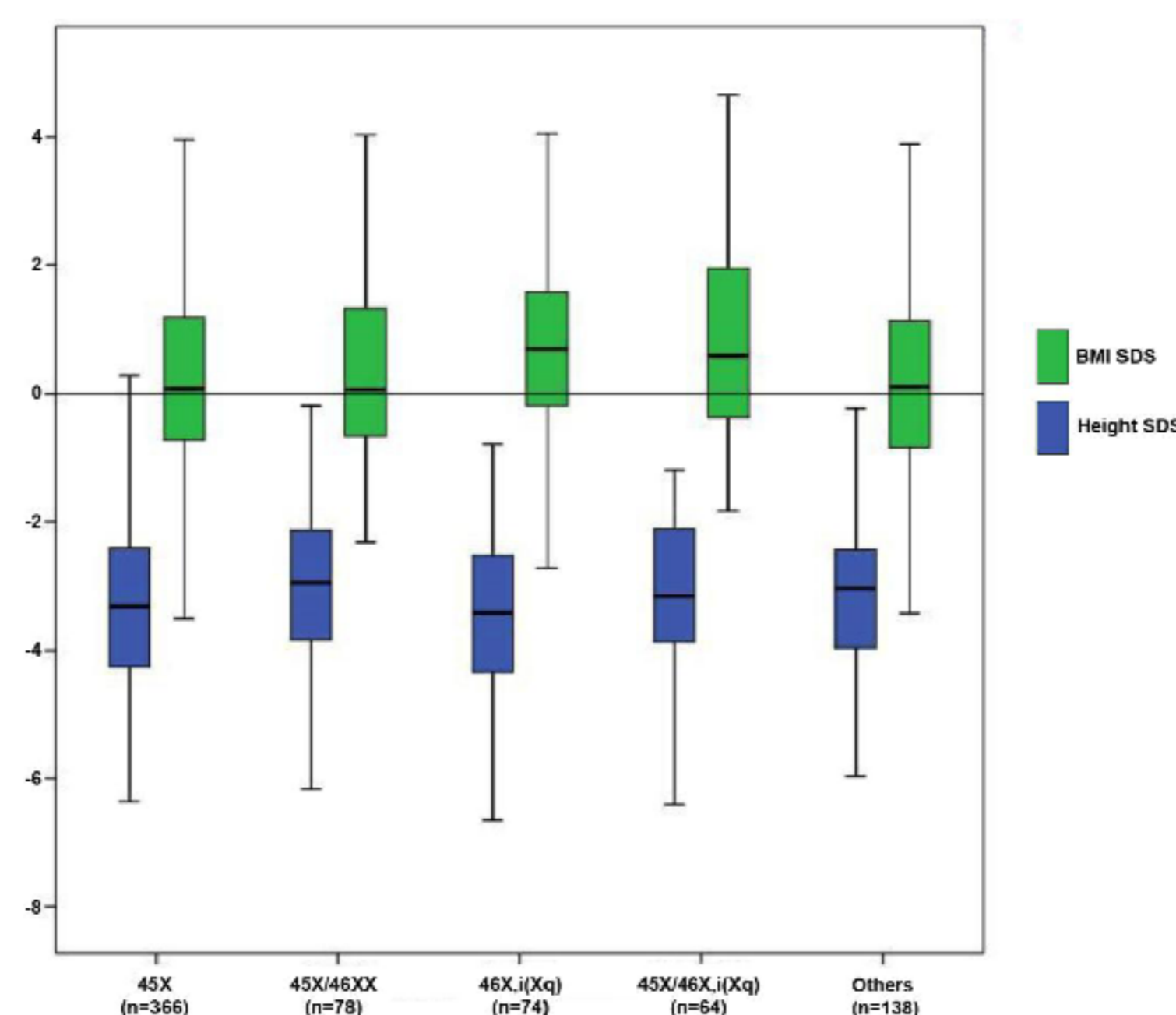
RESULTS

In this cohort prrterm birth frequency was 8.8%. The frequency of SGA birth was 4.2% (2/48) in preterm and 36% (174/483) in term neonates (p=0.000). Mean birth length was 1.3 cm shorter and mean birth weight was 0.36 kg lower than that of normal population. The mean presentation age was 10.1±4.4 years (ranged from 0 to 18 years). Mean height, weight and body mass index (BMI) standard deviation scores (SDS) were -3.1±1.7, -1.4±1.5 and 0.4±1.7, respectively, at presentation. There was no karyotype association with respect to birth length and weight or height and weight at presentation. Patients with isochromosome Xq were significantly heavier than other karyotype groups (p=0.007).



The mean length and weight standard deviation scores in patients with Turner syndrome with different karyotypes at birth

The mean height and BMI standard deviation scores in patients with Turner syndrome with different karyotypes at presentation



CONCLUSIONS

Mid-parental height and age at presentation were the only parameters that were associated with height of children with TS. The frequency of SGA birth was found higher in preterm than term neonates whilst the mechanism could not be clarified. We have found no effect of karyotype on height of girls with TS, while weight was heavier in 46,X,i(Xq) and 45,X/46,X,i(Xq) karyotype groups.

References

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