ovarian follicles. **Conclusion:** Serum AMH correlated well with serum FSH and appears to be a useful marker of the follicle pool. Nevertheless, complementary imaging study is still needed. Karyotype is a good predictive marker of premature ovarian insufficiency when considered together with other parameters.

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Nationwide Study of Turner Syndrome During Childhood in Turkey: Evaluation of Associated Problems

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Background: Turner syndrome is one of the most common chromosomal disorders and is seen in 1:2500 female live births. The disease manifests with various clinical features and can be classified according to karyotype as monosomy, mosaicism, numeric, and structural abnormalities. **Objective and hypotheses:** Patients with Turner syndrome have complicated with various manifestations congenital or acquired. In this study we aimed to emphasise the importance of awareness of all these findings and follow-up in adulthood. **Method:** Study was performed via FAVOR Research Centre in which 842 patients from 35 centers in Turkey were registered. **Results:** Mean age at diagnosis was 10.5 ± 4.8 years. The most common complaints were short stature, delayed puberty, and dysmorphic appearance. Karyotype was 45,X in 50.7% of the patients. Other common karyotypes were 45,X/46,XX in 10.8%, 46,X,i(Xq) in 10%, 45,X/46,X,i(Xq) in 9.5%, 45,X/46,X,r(X) in 3.4%, 45,X/46,XY in 2.7%, 45,X/46,X,idic(Y) in 1.3%, and 45,X/46,X,+mar in 1.2%. SRY was searched in 125 patients and were positive in 24 (19.2%). Urinary system abnormalities were present in 16.4% of the patients and the most common abnormalities were horseshoe kidney, collecting system and rotation anomalies. Cardiac abnormalities were detected in 25%, the most frequent being e bicuspid aorta followed by coarctation of the aorta and aortic stenosis. Thyroid abnormalities were detected in 16.5% of patients including hypothyroidism and autoantibody positivity. Patients with isochromosome X (Xi) had higher frequency of autoantibody positivity compared to other karyotype groups, although all karyotype groups were comparable for hypothyroidism. Gastrointestinal (GI) pathologies were present in 9%. The most common GI pathologies were high transaminase levels, celiac diseases and/or celiac antibody positivity and hepatosteatosis. Ear problems were found in 22% including recurrent otitis media, deafness, and history of tympanostomy. Psychosocial problems were encountered in 29.2%. Physical appearance and infertility risk were the most important factors to cause low self-esteem. Eye problems (strabismus, myopia, and ptosis) were seen in 8.8%. Dermatologic problems like nevus, psoriasis, alopecia, vitiligo, and keloid were seen in 21.8%. Insulin resistance and impaired fasting glucose frequencies were 3.3 and 2.2% respectively. Patients with Xi abnormality had more frequently insulin resistance ($P = 0.042$) and impaired fasting glucose ($P = 0.003$). Dyslipidemia prevalence was 11.3%. **Conclusion:** This study demonstrates the frequency of abnormalities in a large group of patients with TS. Patients should to be examined periodically for these comorbidities in childhood and in transition to adulthood.

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Aortic Dilation in a Large Cohort of Paediatric and Young Adult Patients with Turner Syndrome

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Background: Aortic dilation (AD) occurs in Turner syndrome (TS) increasing the risk of aortic dissection at all ages. There are no current guidelines on what specific aortic diameter measurement should provoke concern in pediatric TS. Because of their small stature, an aortic size index (ASI) has been proposed to normalize the ascending aorta (AA) to body size in young adults' with TS. However, a more reliable index has been also proposed: the ratio of vascular diameter to thoracic vertebra (TV) diameter, which is constant through age in normal children (AVI). **Objective and hypotheses:** To evaluate AD using these two different methods. **Method:** TS patients ($n = 87$) were studied. Ages ranged from 3.2 to 25.7 years. According to chronological age they were divided in three groups (Gr). Gr1 (n: 11): 1–7.9 years, Gr2 (n: 42): 8–15.9 years, and Gr3 (n: 34): ≥ 16 years. Simple chest computed tomography were done in all patients. AA and TV diameters were measured. AD was defined as ASI > 2 cm/m^2 and AVI > 2 SDS according to published reference values. **Results:** AD was significantly greater ($P < 0.01$) in all groups. Gr1 = 81 and 18%, Gr2 = 47 and 2.3%, and Gr3 = 23 and 2.9% of patients, using ASI and AVI respectively. All patients with severe AD (ASI > 2.5 cm/m^2) presented AVI > 2 SDS. **Conclusion:** We found a high prevalence of AD in our population of TS. ASI overestimates the risk of AD in all Grs, particularly in younger patients. AVI seems to be a more useful tool to asses AD in the pediatric population. Additional follow up is necessary to evaluate the long time consequences of these findings.