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. In this study we aimed to emphasise the importance of awareness of all these with various manifestations congenital or acquired. In this study hypotheses: Patients with Turner syndrome have complicated chromosomal disorders and is seen in 1:2500 female live births.

**Results:**
- Karyotype is a good predictive marker of premature ovarian insufficiency when considered together with other parameters.
- Mean age at diagnosis was 10.5 ± 4.8 years. The most common complaints were short stature, delayed puberty, and dysmorphic appearance. Karyotype was 45X in 50.7% of the patients. Other common karyotypes were 45X/46XX in 10.8%, 46.X,i(Xq) in 10%, 45X/46.X,i(Xq) in 9.5%, 45X/46.X,r(X) in 3.4%, 45X/46.X,Y in 2.7%, 45X/46.X,ide(Y) in 1.3%, and 45X/46.X,+mar in 1.2%. SRY was searched in 125 patients and was 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 be examined periodically for these comorbidities in childhood and in transition to adulthood.

**Background:**
- 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 chromosomal disorders.
  - According to published reference values.

**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 45X in 50.7% of the patients. Other common karyotypes were 45X/46XX in 10.8%, 46.X,i(Xq) in 10%, 45X/46.X,i(Xq) in 9.5%, 45X/46.X,r(X) in 3.4%, 45X/46.X,Y in 2.7%, 45X/46.X,ide(Y) in 1.3%, and 45X/46.X,+mar in 1.2%. SRY was searched in 125 patients and was 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 be examined periodically for these comorbidities in childhood and in transition to adulthood.