Editorial

iMedPub Journals
www.imedpub.com

Journal of Healthcare Communications
ISSN 2472-1654

2018
Vol.3 No.2:30

DOI: 10.4172/2472-1654.100140

Turner Syndrome

Ambarkova Vesna*

Department of Paediatric and Preventive Dentistry, Faculty of Dental Medicine, University St. Cyril and Methodius, Skopje, Republic of Macedonia

Received: April 30, 2018; **Accepted:** May 07, 2018; **Published:** May 14, 2018

***Corresponding author:** Ambarkova Vesna

ambveki@yahoo.com

Research Fellow, Department of Paediatric and Preventive Dentistry, Faculty of Dental Medicine, University St. Cyril and Methodius, Skopje, Republic of Macedonia.

Tel: +38970686333

Citation: Vesna A (2018) Turner Syndrome. J Healthc Commun Vol.3 No.2:30

Editorial

People with Turner syndrome typically have one X chromosome instead of the usual two sex chromosomes. Turner syndrome occurs as a numerical chromosome aberration of female embryos lacking one X chromosome and with the karyotype 45 XO. Turner syndrome is the only full monosomy that is seen in humans—all other cases of full monosomy are lethal and the individual will not survive development. The incidence moves upon one girl born on 2,500 live girl births. Levitsky et al. in their review study write about understanding of the pathophysiology, molecular biology, and management of Turner syndrome. Recent findings show that neurodevelopmental differences in Turner syndrome are beginning to be correlated with differences in brain anatomy. Sophisticated genetic techniques are able to detect mosaicism in one-third of individuals previously thought to monosomy X. Prenatal detection using maternal blood should permit noninvasive detection of most fetuses with an X chromosome abnormality [1].

A retrospective, descriptive study of the diagnosis, course, and current status of patients with Turner syndrome is published by Orbañanos et al. In their study gonadal failure was found in 66%; most of whom received replacement therapy. Three patients achieved pregnancy by oocyte donation. Seventy-two percent have been treated with growth hormone, together with oxandrolone in 26%, while final stature was short in 69% of patients [2].

Clinical image is characterized by: slow and low growth of girls, with the average height from 125 to 145 cm, normal or easily slowed down mental development or with mental retardation at a lower degree (IQ up to 20% or lower). Subsequently, the primary sterility conditioned by gonadal dysgenesis and the frequent existence of congenital heart defects (coarctation of the aorta) often occurs in the thyroid gland and the presence of renal disease. People with Turner syndrome can lead healthy lives. But they typically require some consistent, ongoing medical supervision to detect and treat complications [3,4].

Characteristics of the face are a narrow upper jaw with a high palate which leads to cross bite. Also, the lower jaw is distally placed resulting in developing of distal biting and significant incisal distance in these patients. The appearance of open bite in the area on the frontal and distal teeth also very often can be seen [5]. Ahiko et al. in their study determine the maxillofacial morphology and oral characteristics of Japanese girls with TS and early mixed dentition. Lateral cephalograms showed a retrognathic maxilla and mandible and a small gonial angle, while nine patients had a high-arched palate. In their investigation nine patients had class II first molar relationship occlusion and one had mesial step-type occlusion. Three patients showed ectopic eruption of the maxillary first permanent molar accompanied by resorption of the maxillary second primary molar, while eruption of the permanent teeth tended to occur early [6].

Increased cavities coursed by dental caries and increased gingival indexes indicate an increased risk of dental caries and the occurrence of periodontal diseases [7].

The mesiodistal width of the teeth is smaller because of the thinner enamel and the smaller amount of dentine, especially in the lower molars. The lack of the X chromosome on which the amelogenic gene is located affects the quantity and quality of the amelogenin, which affects the formation of the enamel. The anomalies of the roots, especially the lower premolars, are common, the roots are shorter or two root are present. When performing endodontic therapy, these characteristics of the roots should be taken into consideration [1]. The appetences of lip and palate clefts are more frequent in patients with Turner syndrome than the general population [8].

References

1 Levitsky LL, Luria AH, Hayes FJ, Lin AE (2015) Turner syndrome: Update on biology and management across the life span. Curr Opin Endocrinol Diabetes Obes 22: 65-72.

2 Orbañanos IR, Desojo AV, Indart LM, Bolado GG, Estevez AR, et al. (2015) Turner syndrome: From birth to adulthood. Endocrinol Nutr 62: 499-506.

3 Eckhauser A, South ST, Meyers L, Bleyl SB, Botto LD (2015) Turner syndrome in girls presenting with coarctation of the aorta. J Pediatr 167: 1062-1066.

4 Schäfer M, Browne LP, Truong U, Jaggers JJ, Mitchell MB (2018) Aortic stiffness in adolescent Turner and Marfan syndrome patients. Eur J Cardiothorac Surg.

5 Faggella A, Guadagni MG, Cocchi S, Tagariello T, Piana G (2006) Dental features in patients with Turner syndrome. Eur J Paediatr Dent 7: 165-168.

6 Ahiko N, Baba Y, Tsuji M, Horikawa R, Moriyama K (2018) Investigation of maxillofacial morphology and oral characteristics with Turner syndrome and early mixed dentition. Congenit Anom (Kyoto).

7 Szilágyi A, Keszthelyi G, Nagy G, Madléna M (2000) Oral manifestations of patients with Turner syndrome. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 89: 577-584.

8 Midtbe M, Halse A (1996) Occlusal morphology in Turner syndrome. Eur J Orthod 18: 103-109.