

Turner's syndrome And Obsessive Compulsive Disorder – A Case Report

Dr.Archana.V¹, Dr.K.Sarada², Dr.S.Radharani³, Dr.N.N.Raju⁴

¹Postgraduate, ²Asst.Prof. of Psychiatry, ³Prof. of Psychiatry, ⁴Prof. and HOD.

Department of Psychiatry, Andhra Medical College, Visakhapatnam, Andhra Pradesh, India

Abstract: The loss of all or part of one X sex chromosome during embryogenesis results in Turner's syndrome (TS). Certain studies showed specific cognitive deficits and psychiatric manifestations like mood and anxiety disorder. There are case reports of concomitant TS with schizophrenia. We present here a case of TS with clinical features of delayed attainment of secondary sexual characters, short stature, overweight, wide carrying angle and short bilateral 4th metacarpals and metatarsals. Her ultrasound of abdomen and pelvis, showed hypoplastic infantile uterus and streak like ovaries. The TS patient had psychiatric manifestation of obsessive compulsive disorder, which has not been reported so far. The co-existence of Turner's syndrome and OCD gives a clue of any possibility of genes related to aetiology of OCD. It is important for the practitioners to understand the clinical spectrum and natural courses, including the development of psychiatric disorder in TS.

Keywords: anxiety, compulsive, hypoplastic, obsessive, X chromosome.

I. Introduction

The loss of all or part of one X sex chromosome during embryogenesis results in Turner's syndrome (TS). This chromosomal disorder affects ~ 1/2500 live female births, presenting commonly with short stature and hypogonadism^[1-3]. Certain studies showed Specific cognitive deficits and psychiatric manifestations like mood and anxiety disorder^[4,5]. The coexistence of obsessive compulsive disorder (OCD) in Turner's syndrome has not been reported so far.

II. Case report

A 31 year old unmarried female was brought to psychiatry department (Government hospital for mental care, Andhra Medical College Visakhapatnam) for complaints of excessive use of water and insisting on 40-70 buckets of water for bathing every day from 4 years. Patient develops distress and anxiety on trying to resist these bathing rituals. These rituals take 3-4 hours/day and associated with decreased involvement in daily household activities.

Her family history shows that, she was born of second degree consanguinity and of full term, normal vaginal delivery. She discontinued schooling after her failure in 7th standard. She attained menarche at 20 years of age after Hormonal replacement.

On mental status examination, she was conscious, well kempt with normal psychomotor activity and relevant, coherent speech, with thought content of repeated ideas of excessive use water for bathing associated with distress on resisting these ideas - suggestive of obsessive ideas which are followed by compulsion of excess water usage. Her mood was anxious. Her orientation to person, place and time were intact. Her immediate, recent and remote memory was intact.

On IQ assessment, her intelligence was found to be dull, normal intellectual functioning with IQ of 81. Based on clinical examination, DSM IV –TR diagnosis of Obsessive Compulsive disorder was established.

On general examination she was short and overweight. On referral, the endocrinologist opined the diagnosis of Turner's syndrome with clinical features of delayed attainment of secondary sexual characters i.e., menarche and breast development at 20 years of age with SMR of A₂B₄P₂, short stature (height=133cm) (Figure 1), over weight (weight=45kgs, BMI =25.43), wide carrying angle (Figure 2) and short bilateral 4th metacarpals (Figure 3) and 4th metatarsals (Figure 4). Her ultrasound of abdomen and pelvis, showed hypoplastic infantile uterus and streak like ovaries. Her hormonal assay showed increased FSH (24.1mIU/ml) increased LH (30.3mIU/ml) and decreased Estradiol (<5.0pg/ml). Her Cytogenetic result showed 46XX/ 45XO female karyotype with Turner's syndrome mosaic features (in this study of 20 metaphases, 08 revealed a female karyotype with monosomy of X chromosome condition). (Figure 5)

She was planned to start on with Estrogen replacement therapy. She was treated with SSRI and has shown improvement in her psychiatric manifestations.

III. Discussion

In a study done by Graca Cardoso^[6], 52% of the TS women met criteria for a current or a past depressive or anxiety disorder. Few sporadic case reports of concomitant TS with schizophrenia are reported worldwide^[7, 8]. The finding for our TS case gives a clue to possibility of occurrence of OCD. The co-existence of Turner's syndrome and OCD gives a clue of any possibility of genes related to aetiology of OCD.

IV. Conclusion

The majority of Turner's syndrome individuals are of normal intelligence, social functioning and employment. But there are case reports of psychiatric manifestations in TS. It is important for the practitioners to understand the clinical spectrum and natural courses, including the development of psychiatric disorder in TS individuals.

References

- [1] Lippe B. Turner syndrome. *EndocrinolMetabClin North Am* 1991;20:121–52
- [2] Saenger P. Turner's syndrome. *N Engl J Med* 1996; 335:1749–54
- [3] Elsheikh M, Dunger DB, Conway GS, et al. Turner's syndrome in adulthood. *Endocr Rev* 2002; 23:120–40
- [4] Skuse DH, James RS, Bishop DV, et al. Evidence from Turner's syndrome of an imprinted X-linked locus affecting cognitive function. *Nature* 1997;387:705–8
- [5] Delooz J, Van Den Berghe H, Swillen A, et al. Turner syndrome patients as adults: a study of their cognitive profile, psychosocial functioning and psychopathological findings. *Genet Couns* 1993;4: 169–79
- [6] Graca Cardoso, Robert J. Daly, Nazli A. Haq, et al. Current and lifetime psychiatric illness in women with Turner syndrome. *GynecolEndocrinol* 2004;19:313–319.
- [7] Sook Young Jung, Joo Won Park, Dong Hyun Kim, et al. Mosaic Turner syndrome associated with schizophrenia. *Ann PediatrEndocrinolMetab* 2014;19:42-44.
- [8] Kawanishi C, Kono M, Onishi H, Ishii N, Ishii K. A case of Turner syndrome with schizophrenia: genetic relationship between Turner syndrome and psychosis. *Psychiatry ClinNeurosci* 1997;51:83-5.



Figure 1: showing short stature



Figure 2: showing over weight, wide carrying angle



Figure 3:short 4th metacarpal



Figure 4: short 4th metatarsal

Figure 5: karyotyping

