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SHORT COMMUNICATION

Koro in female: A case report and a mini review

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Abstract Koro is a culture-bound psychogenic illness of South-East Asia but also reported from several European countries like Britain, Czech Republic, France, Germany, Greece, Hungary, Italy, Ireland, Poland, Portugal, Spain, and Turkey but all case reports were of male Koro cases, except the Hungary report. We report a case of a Koro-like presentation with reactive depression (ICD 10 Code: F32) in a Caucasian female from England along with a brief review of world Koro literature on female Koro. It is the first Koro reporting in a Caucasian female. We conclude with the emphasis on psychosexual history taking in each case to understand Koro's culture-boundness.

Introduction

Koro is a culture-bound psychiatric morbidity reported in both males and females. It is a sudden perception of acute retraction of penis in male or breast or vulva in female with an acute panic like reaction (both psychological and somatic manifestations) and acute fear of impending danger, most commonly death (or sexual disability) from this malady. The whole episode lasts from few minutes to an hour.[1] The presentation of Koro varies in different forms and combination. Very surprisingly, except from the epidemic setting, Koro in female is very rarely reported as a sporadic case. We are reporting one female Koro-like case from England. A brief review of global literature on female Koro is also done.

Clinical case

One of the authors (MC) examined Miss X, a 27-year old single Caucasian woman, who was referred by her general practitioner (GP) to Community Mental Health Team. She is living with her mother and going through difficult time in last four weeks following the separation from her boyfriend. She worked as an office secretary and was only child of her parents. Her parents were divorced when she was 8

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years of age. Her childhood was uneventful. She smoked 5–10 cigarettes a day and was described herself as a social drinker. She has never used cannabis or other illicit drugs. She was in a stable relationship with her boyfriend for seven years. He suddenly decided to end their relationship as he told her that she was 'boring and inert' and he had lost interest in her in a romantic way, four months ago. She started to notice that her mood was getting down progressively few days after this break and she had many sleepless nights and she could not concentrate at work. A feeling of worthlessness and despondency occupied her mind. She went on sick leave and advised by her GP, Tab Temazepam 10 mg nocte.

During mental state examination, she reported feeling quite down and upset because of the attitude of her boyfriend. This was her first stable relationship from age of 20 and found that too traumatic. She reported with a great concern and anxiety that since last week, she was also feeling as if her genital organ (vagina) were shrinking (''becoming flat'') and as if getting back into her abdomen. She also reported that her breasts were shrinking and getting smaller in size. These ''thoughts are so recurring and disturbing''; she ''checked the genitals and her breast in front of the mirror'' quite a few times. She requested a per vaginal examination to confirm this malady, which was humbly refused and was explained that most probably this were her feelings due to her state of mind and if she wanted a vaginal examination, she need to contact her GP for referral to a gynaecologist and she accepted that after some persuasion. Her self-care was reasonable and she felt that at times, life was not worth living but denied any suicidal intent or planning. There was no evidence of any delusions or hallucinations. There was no history of any physical or sexual abuse. She has no previous knowledge about such symptoms.

She was prescribed Citalopram 20 mg mane and advised to use Temazepem 10 mg nocte prn only. At 4 weeks follow up, she reported moderate improvement in her mood and hope to return back to work next week. She was asked about her ideas of reducing breast size and genitals and she said that this was not so preoccupying her mind now and so did not arrange for gynaecological examination. She also expressed her thanks for the supportive discussion rendered to her in the first consultation. She felt hopeful that if her mood improves, then these ideas would disappear. She was seen again after 8 weeks and reported that she was back at work full time and her ideas about reducing genital and breast size had 'totally gone' now. She reported that following the end of relationship, she did not feel like a ''complete woman'' and were ''doubtful about her female sexuality''. She said she was returning back to her ''normal self now by lots of self argument''. She was offered further appointment but she declined and was happy to be supervised by her GP.

Discussion

Koro in female was probably first described by Wulffen Palthe,[2] a Dutch physician from Indonesia in the last century. Earliest reference to a female Koro case is mentioned in Palthe's 1935 report[3] as: ''The disease was also observed in females, in chief complaints being that the labia ''shoot within''. It was noted that a woman in Mandomai village died from Koro. The local law forbade men to help female illnesses relating to genitalia''. Sri P.H. Manson-Bahr[4] in his text book on Tropical Diseases, mentioned: ''An analogous state in women is also described where a sense of diminution of the labia and shrinkage of the breasts constitute the cardinal feature''.

Although till date the English literature on Koro contains reports of not less than eleven large epidemics and an over a hundred sporadic cases, no reporting has however focused female Koro effectively in detail. In his elegant global analysis of socio-cultural myth in Koro, Prince[5] thus aptly comments, ''I have not been able to find a single case history of a female Koro sufferer. The female experience has been neglected; we do not even know whether, as in the male, there is terror of dying consequent to complete genitalia retraction''. Almost all reports, in particular of the epidemic form, have focused on the male Koro account elaborately with just a passing mention, if at all, of female cases.[6] So there remains a large gap in our understanding of the clinical profile of Koro in females. It is evident from at least eleven such epidemic reporting that though Koro occurs predominantly in males, female morbidity is also not uncommon: female to male percentage being 10.51 (Table 1).

Astonishingly, in spite of about 108 sporadic Koro case reports published during 1967–2017, only two cases of Koro in females have been reported in the literature. One from Hungary,[18] a 29-year old married Korean female – who presented both breast and genital symptoms at the background of transient psychotic episode with depersonalization. The second case[19] is, a 21-year, single college student from India, who: ''experienced a sudden feeling of breast and genitalia shrinking associated with the fear of loss of womanhood and death induced by the thought that complete disappearance of the genital organ may result in loss of her womanhood and death''. The authors found high body dysmorphic disorder score and the patient responded well with antidepressant and a low dose antipsychotic treatment.

The present case is the first Caucasian female Koro in the world Koro literature. She may be diagnosed as Koro-like symptom (KLS)[1] with reactive depression. Koro-like because she had no acute onset and there was no fear of death from this genital symptoms. Moreover, her Koro-like perception stayed over a couple of weeks. She gave a very valuable clue about the ideational content (feeling of deficiency in womanhood) of her genital symptoms and described some obsessive-compulsive behaviour by checking and rechecking the genitalia and breast. It is interesting to note that, also in male Koro, the perception of inadequate masculinity plays a role in psychopathology – it is reported that the fear of sex change or turning into a

[1] In classical or cultural Koro the three symptoms must be present (1) perception of acute retraction of breast or vulva in female (or penis in male); (2) acute panic like reaction and (3) acute fear of impending danger, most commonly death or physical or sexual disability, at the background of some related cultural beliefs. The whole episode lasts from few minutes to an hour. In Koro-like (KLS) presentation, the background cultural myth is absent; the onset is gradual rather than sudden and the fear of death is absent and is usually associated with other mental health diagnosis.[24,26]

Table 1 Epidemic distribution of reported female Koro cases.

Sl. No.	Author (year)	Country	Total case	Male (%)	Female (%)	F:M%
1	Koro Study Team (1969)[7]	Singapore	469	454 (96.8)	15 (3.2)	3.30
2	Suwanlert and Coates (1978)[8]	Thailand	350	338 (96.6)	12 (3.4)	3.55
3	Moekti and Denin (1978)[9]	Indonesia	13	11 (84.6)	2 (15.4)	18.18
4	Dutta et al. (1982)[10]	India/Assam	83	64 (77.1)	19 (22.9)	29.69
5	Sachdev (1985)[11]	India/Assam	31	18 (58.1)	13 (41.9)	72.20
6	Chowdhury et al. (1988)[12]	India/West Bengal	405	357 (88.1)	48 (11.9)	13.45
7	Tseng et al. (1988)[13]	China/Guangdong	232	195 (84)	37 (16)	18.97
8	Ghosh et al. (2013)[14]	India/West Bengal	55	52 (94.5)	3 (5.5)	5.76
9	Kumar et al. (2014)[15]	India/Assam	70	68 (97.1)	2 (2.9)	2.94
10	Debbarma et al. (2016)[16]	India/Tripura	57	49 (86.0)	8 (14.0)	16.33
11	Dan et al. (2017)[17]	India/West Bengal	64	49 (76.6)	15 (23.4)	30.61
Total			1829	1655 (90.8)	174 (9.2)	10.51

eunuch is reported by male Koro patients. So in female cases too (present one and the Indian case) the perception of loss of or devalued concept of womanhood plays a similar important role. Fear of sterility in female Koro is also reported[20] and a devalued self-concept related to sexual identity, potency and attractiveness are potential contributory factor for Koro expression, both in male and female.[6] Psychosexual disorders are sexual problems or issues of predominantly of psychological origin in the absence of any organic pathology.[21] Koro perception may be viewed as one the variant of this spectrum. It is reported that psychosexual disorders ''may arise due to guilt, stress, anxiety, nervousness, worry, fear, depression, distorted body image, physical or emotional trauma, abuse, and rape''.[21] The role of guilt acts as a trigger in vulnerable individual. An example of a male Koro is reported who developed Koro-like symptoms associated with erectile dysfunction and religious guilt.[22]

More interesting is the fact that both, the Hungarian and the Indian case were convinced that intercourse by a male will cure the genital defect! The unfulfilled love-affair played a role in unmasking the Koro perception in the present case (real) and also in the Hungarian case (imagined). It is also worth noting here that depressive episodes may generate atypical genital symptoms as reported from Sri Lanka[23]: a 52 year old lady during her major depressive episode experienced high distress from her day long ''sensation in her vagina as if she was having sexual intercourse with a man'' and believed that her vagina was not working properly. She had a strong guilt and social shame over a past illicit relation with a married man. This case showed that psychosexual guilt or shame may predispose to varieties of pathoperception relating to genital organ. The role of life events and a diagnosis of depression may be suggestive of a category ICD 10 CM Code: F43.21 (Adjustment disorder with depression – also called exogenous, reactive or situational depression) which occurs when an individual is unable to cope with a particular stress or major life event. So, psychosexual history taking in female Koro is a very important clinical issue which may unfold the relation between cultural beliefs and construct of female sexuality and the emergence of Koro perception.

Conclusion

One important research agenda may be to explore why female Koro is expressed in an epidemic setting in large numbers but not so at all sporadically in the community! Is it the cultural taboo or inhibition that suppresses the expression of atypical sexual symptoms among females? Or the mass-psychogenic influences of the epidemic facilitate the female Koro expression to overcome the cultural barrier? More in-depth future research on female Koro morbidity, focusing on patient's explanatory model, be it in epidemic setting or sporadic, is warranted to understand the gender specificity of Koro psychopathology. Secondly another point of observation is that typical Koro presentation is rare in the western culture, as noted in the present case, and the cases reported are usually secondary to some psychiatric disorders. Moreover, the presentation is also not acute and suggestive of many possible diagnoses like hypochondrical delusion or altered body-image as hypochondrical concern or body-image disturbances with depression.[24] The classical symptoms of Koro are rarely reported in Caucasians.[25]

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Conflict of interest

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