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Penile dysmorphophobia-obsessive compulsive disorder with Koro-like symptoms: a report of two cases

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Abstract

Background: Koro syndrome is a cultural manifestation of anxiety and distress seen in certain parts of the world. Its origin in these populations is suggested to arise from penile (related to the penis) dysmorphic thoughts on the background of performance anxiety in sexual situations. Body dysmorphia arises over persistent thoughts about a part of the body being flawed so that the individual worries excessively about it. Its presentation largely mimics obsessive-compulsive disorder (OCD).

Methods: Here the authors describe two cases presenting with Koro-like symptoms seen in the southern part of India in a suburban locality which resolved with standard anti-obsessional treatment. Underlying both these cases, prominent penile dysmorphophobia was found (fixation on imagined defects of the penis length).

Discussion: The presented cases were young adult males. Fear of impending life events (marriage) was the most likely factor contributing to performance anxiety related to intercourse in both cases. Symptoms typically described in Koro syndrome have an obsessive quality. The existing literature on Koro-like features in patients with OCD has led many authors to classify it as an obsessive-compulsive spectrum disorder and their ideas have been validated in standard classificatory systems.

Conclusion: In cases presenting with Koro syndrome, other obsessive symptoms may be co-existent and require to be ruled out. It is also important to explore anxiety in those clients and provide them with treatment-pharmacological and non-pharmacological for anxiety related to performance and penile dysmorphia. It is important to highlight this aspect of the syndrome in future classificatory systems.

Keywords

Koro, Penile dysmorphophobia, Obsessive-compulsive disorder, OCD, Performance anxiety, Organ anxiety, Culture-bound syndrome, Obsessive-compulsive spectrum, Body dysmorphic disorder

INTRODUCTION

Koro is a recognised culture-bound syndrome primarily reported in Eastern and Southeast Asian countries which include India, China, Japan, Myanmar, and neighbouring regions (Chiang, 2015).

Its name is thought to originate from the word 'kura' meaning tortoise which is a symbolic representation of the beliefs typically held in this condition – that of the penis shrinking and withdrawing into the abdomen (Alan Scott Bellack et al., 1998).

It is a psychogenic reactive state related closely to the sociocultural construct of sexual somatisation. Van Brero, who first described this disorder, regarded it

to have an uncanny obsessive character (Chowdhury, 1996).

In DSM-5, it has been placed in the category of 'other specified obsessive-compulsive and related disorders' (American Psychiatric Association, 2013).

Obsessive-compulsive disorder (American Psychiatric Association, 2013) is typically described by the occurrence of recurrent, intrusive and persistent thoughts which are anxiety-provoking and so actively resisted by the individual, often without success. These may or may not be accompanied by compulsive acts performed to reduce the anxiety arising from the obsessions.

Penile dysmorphophobia or penile dysmorphic disorder is a condition where the person has a subjective conviction and excessive concern about the length and appearance of the penis (Chowdhury, Bandyopadhyay, and Brahma, 2022). When severe, they may meet the criteria for body dysmorphic disorder based on DSM 5 (American Psychiatric Association, 2013).

Men usually regard penises as a sign of masculinity and sexual prowess (Scher, 2012). These dysmorphic thoughts are often linked to sociocultural or magical beliefs centring around exposing the penis in sexual situations.

While Koro is a culture-bound syndrome associated with paranoia and anxiety and clinically different from penile dysmorphophobia – an anxiety disorder, it may be hypothesised that penile dysmorphic thoughts and behaviour are the root to vulnerability for Koro syndrome (Chowdhury, 1989). These thoughts are often strongly correlated with performance anxiety related to intercourse (Veale et al., 2015). The anxiety, typically of a hypochondriacal or dysmorphophobia quality, is indistinguishable from OCD due to its recurrent, persistent and intrusive nature (Okechukwu et al., 2020).

Literature on penile dysmorphophobia is sparse, possibly because those living with it usually do not present to the psychiatrist unless gross behavioural disturbances are noticed. Beliefs on these themes may also be related to the sociocultural background of the person. The authors have attempted to throw light on this topic through the description of two cases and try to justify their inclusion under the OCD group.

METHODOLOGY

Here the author describes two young adults presenting with OCD presenting with complaints similar to Koro syndrome and how they were treated. They presented to the outpatient department of Sri Siddhartha Institute of Medical Sciences and Research Centre, Nelamangala located in rural Bangalore in South India. The first case was later admitted due to suicidal risk.

Informed consent from both the participants before their inclusion into the study and institutional ethical clearance was obtained.

CASE 1

The first case describes a 29-year-old single male presenting with paranoid doubts about turning into a eunuch and who was admitted because of a risk of suicide.

The doubt of whether his 'body' was changing began about two weeks after his family invited marriage suitors to their home. His initial doubt was that his penis had shrunk and was later replaced by the fear of this organ disappearing into his body, causing him to become a eunuch and unable to participate in sexual pleasures. It started as a doubt that gradually became recurrent, persistent and intrusive.

He was diagnosed to have OCD with poor insight based on DSM 5 classificatory system (American Psychiatric Association, 2013). He scored 40 out of 45 on the Yale-Brown Obsessive Compulsive Symptom Severity Scale (Y-BOCS) (Goodman et al, 1989). Evaluation of the Y-BOCS checklist did not reveal other obsessions or compulsions.

Routine bloodwork did not reveal anything unusual. He was started on routine anti-obsessional treatment and low-dose antipsychotics (fluvoxamine 100 mg/day with risperidone 1 mg/day). He improved after a month, with no further reports of anxiety related to penis length or beliefs on its morphological alteration. He was seen to be keeping well on later outpatient visits for the next three months after which he dropped out of the study.

CASE 2

The second case describes a 28-year-old single male presenting with doubts about losing masculinity and turning into a eunuch after the administration of fluoxetine.

He had a past history of OCD with doubts about if he had spoken 'correctly' while talking to others. He was first seen by the author with symptoms of repeated cleaning due to obsessions with dirt and contamination, and was diagnosed using DSM-5 (American Psychiatric Association, 2013).

He was started on fluoxetine for his symptoms after routine investigations like blood, renal and liver parameters came back normal. He scored 35 out of 45 on the Y-BOCS. The symptoms checklist revealed past obsessions related to cleanliness.

When he was seen after several follow-up sessions, he reported significant improvement (score recorded on Y-BOCS severity scale-10). However, he reported having a low desire for masturbation and symptoms suggestive of erectile dysfunction, a common adverse effect seen with fluoxetine. When this was explained to him, he was unwilling to continue the medication and based on mutually agreed terms, a decision to cross-taper fluoxetine (40 mg/day) with sertraline (till 150 mg/day) was made.

On the next visit, he presented with doubts that his penis was shrinking and would soon vanish. This was a drastic change from his previous profile of symptoms. When enquired further, he believed he was being punished by God as he was continuing in a heterosexual relationship of his own while his parents were searching for a suitor for his marriage. This history was revealed in confidence to the treating doctor on that visit.

In the next follow-up, his concerns had resolved without any changes in the dose of sertraline. He said that he had left his relationship and was focused on marrying the person chosen by his parents. He admitted to being worried about his marriage being fixed before the onset of symptoms. He attributed the resolved symptoms of penile dysmorphophobia to ignorance. He was doing well when seen again after three months after which point he dropped out of the study.

DISCUSSION

Similarities between the cases

Both cases presented here were young adult males approaching their thirties who had been diagnosed with OCD with high latent anxiety. The second case already had a diagnosis of OCD when first seen.

For both of them, there was an impending life event (marriage) likely to cause performance anxiety related to intercourse. Both the cases admitted to being preoccupied with thoughts and life after marriage. Both the patients presented with symptoms of penile dysmorphophobia that are typical of Koro syndrome, had an obsessive quality to their symptoms and improved with standard treatment.

Similar literature

There are a few existing case reports of Koro-like

features in patients with OCD.

The description of Koro appears to be a culture-bound construct of obsessive thoughts and behaviours related to the shrinkage of the penis. Silva and his colleagues (Silva et al, 2016) reported remission after treatment with fluvoxamine 200 mg/day. He observed Koro to be a secondary manifestation of other psychiatric disorders based on the available literature in the Western world.

Another report on Koro (Prakash and Kar, 2019) syndrome co-existing with OCD in the same person (Ghosh and Chowdhury, 2020) has drawn similarities between Koro and OCD based on the occurrence of

i) Compulsive ritualistic tying behaviour of the penis to prevent its shrinkage is often seen in affected individuals.

ii) Classification of Koro syndrome in “other specified obsessive-compulsive and related disorders” in DSM-5.

Factors for the development of penile dysmorphophobia and Koro

Penis image perception is largely influenced by sociocultural beliefs. In cultures where Koro syndrome is prevalent, there usually exists a taboo on sexual topics and free discussion on penile length is invariably not possible. Individuals with obsessive-compulsive behaviours are more likely to generate heightened penis awareness (Chowdhury, 1993). They may perform excessive scrutiny of their organ, attributing sexual anxiety or dysfunction to self-alleged anatomic-physiological ‘deformities’ of the penis. These conditions may cause them to believe in a ‘disease’ or ‘abnormal’ character based on their misconceptions (Chowdhury, 1993).

Penile dysmorphophobia has been characterised as a type of body-dysmorphic disorder by many authors. It also shares similarities with Koro syndrome regarding preoccupation with penises. There exists a strong interrelationship between body dysmorphic disorder, which is characterised under obsessive-compulsive spectrum disorders and OCD itself based on prevalence rates, similar anatomical areas of brain involvement and the nature of symptoms (Castle et al., 2021).

Some authors have also attempted to describe penile dysmorphophobia as a cultural manifestation

of body dysmorphic disorder, arising due to preoccupation over penises, considering own penile length as 'small' and anxiety related to sexual role (Spurgas, 2005). These are often attributed to sexual misconceptions, watching excessive pornography or premarital anxiety (Veale et al., 2015).

Need for further research

Koro is a culture-bound syndrome by itself. Further research is needed to understand the potential impact of culture on body image perception and penis image. More studies are also required to understand the efficacy of anti-obsessional treatment and therapies useful in obsessive-compulsive illness in penile dysmorphophobia or Koro syndrome.

To conclude, Koro syndrome, initially believed to be localised to certain parts of East Asia, has now been found to be far more prevalent globally. While penile dysmorphophobia as a clinical entity may or may not fulfil the criteria for body dysmorphic disorder, it can reliably be hypothesised to be at the root of the manifestation of Koro syndrome in vulnerable individuals. They are like two sides of the same coin. The recurrent, persistent and intrusive nature of thoughts in Koro syndrome justifies its inclusion in the OCD group as depicted in DSM-5. On the other hand, penile dysmorphophobia and body-dysmorphic disorder present a strong argument to continue their association with the obsessive-compulsive spectrum bearing in mind the similarities in presentation, treatment and neuropsychiatric models.

CONCLUSION

Clinical evaluation of abnormal genital perception is challenging. All patients presenting with Koro syndrome should be evaluated in detail based on the Y-BOC checklist (Goodman et al., 1989) for other obsessive-compulsive features. While it may be important to find out whether the symptoms are predominantly influenced by the patient's sociocultural background (as in Koro syndrome) or a part of another illness like OCD, body dysmorphic disorder, or depression, it is worthwhile to also recognise that they may often exist as comorbidities.

It may be worthwhile to explain them as part of a spectrum.

DECLARATIONS

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