



Koro Symptoms in a Hispanic Male

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Abstract

We present the case of a 71-year-old Hispanic male in the Midwestern United States with no previous psychiatric history, presenting with Koro-like symptoms including fear of imminent death due to the belief that his penis was retracting into his abdomen, thus requiring admission to a psychiatric inpatient unit. To our knowledge, this is the first time this culture-bound phenomenon has been recorded in a Hispanic male. Our discussion focuses on comparing this case to other Koro and Koro-like cases outside of the classically described cultural Southeast Asian region. We also discuss transcultural psychiatric insights related to Koro and highlight the variety of reported neuropsychiatric contexts of Koro-like symptoms as applicable to this case.

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Case

The patient was a 71-year-old cisgender, heterosexual, divorced, able-bodied male born in the United States, identifying as Hispanic. He had no previous psychiatric history and arrived at the Emergency Department by ambulance reporting his penis was broken from “masturbating too hard the night before”. He was panicked and restless and pulling on his penis. He stated that he was going to “explode” due to his abdomen expanding as a result of his penis retracting. It was his fourth similar presentation in seven days.

The patient was a poor historian and substantial information was collected from his family member and in-home caregiver of 10 years. The patient spent much of the previous 10 years drinking alcohol alone in his home after being accused of molesting a child family member but was never convicted. The patient had a history of gastroesophageal reflux disease, a

gastric bleed three years prior requiring blood transfusion, and hypertension. He admitted to smoking marijuana daily. He admitted to drinking liquor daily with inconsistent reports of being sober for the past three years. He was a former cigarette smoker. His physical exam showed no bruising or swelling of the penis. Foreskin was easily retractable and normal appearing. He was able to urinate without difficulty. His physical exam was non-contributory. His lab results were significant for low mean corpuscular volume, mean corpuscular hemoglobin, and elevated red blood cell distribution width. Blood alcohol was negative. CT of the brain revealed mildly enlarged CSF spaces and mild parenchymal atrophy. There was a prominent retro cerebellar fluid collection representing a mega cisterna magna or arachnoid cyst. Abdomen and Pelvis CT was significant for lobulated contour consistent with underlying cirrhosis and a large hiatal hernia and descending and sigmoid diverticulosis. Vital signs, chest and abdominal x-ray, EKG were non-concern-



ing. The Emergency Department physician concluded that perceived symptoms were due to his mental condition. Psychiatry was consulted due to the inconsistencies in penis-related concerns and physical exam. Quetiapine 25 mg nightly was started and a recommendation made for neurological assessment for neurocognitive disorder. The patient was agitated after he felt his concerns for a retracting penis were not being addressed in the Emergency Department and he was administered olanzapine 5 mg and later ziprasidone 20 mg intramuscular. He was admitted to the psychiatric unit of the general hospital on an involuntary basis and his chief concern was “My penis is being sucked into my body”.

The patient was started on alcohol withdrawal protocol. He was unable to sit for an assessment, appearing panicked, grabbing his abdomen and penis. He perseverated on the belief that his penis was “going down into (his) body” and he was unable to be redirected. He asked for his penis to be examined in private. He was not reassured by the physical exam revealing normal appearing penis. He appeared agitated, positioning himself at the exit, making fists, and insisting he leave the psychiatric floor to get medical treatment for his penis. He would frantically manually search for his penis in the open areas of the psychiatric unit and retreat to his room to expose his penis and examine it. He repeatedly asked treatment professionals to examine his penis. He denied all other psychiatric concerns. He was diagnosed with unspecified schizophrenia spectrum and other psychotic disorder, unspecified anxiety disorder, alcohol withdrawal, without perceptual disturbances, alcohol use disorder, severe, and cannabis use disorder, moderate. Other “rule out” diagnoses included unspecified neurocognitive disorder, Obsessive Compulsive Disorder, Delusional Disorder, delirium, and substance induced schizophrenia spectrum and other psychotic disorders, and Koro. The Koro diagnosis was not included initially due to concerns for lack of diagnostic clarity given the rare incidence of this disorder, non-classical demographic description, and co-morbid conditions. He was started on olanzapine disintegrating 5 mg tablets, nightly. Neurosyphilis and HIV testing were negative.

Safe alcohol withdrawal was prioritized and treated with diazepam and as needed lorazepam with a successful taper with Clinical Institute Withdrawal Assessment for Alcohol (CIWA) monitoring. The concurrent second clinical objective was treating agitation secondary to delusional beliefs. Olanzapine was titrated rapidly to 20 mg nightly with good effect but with mild cogwheeling side effect that was eliminated with trihexyphenidyl 1 mg twice daily. Nursing staff reported concerns for retarded catatonia and lorazepam was added back to his regimen and titrated to 2 mg twice daily. He held to the belief about his penis retracting into his body with progressively less tenacity and was less concerned or anxious about this after adding fluoxetine and titrating to 40 mg daily. His scheduled lorazepam was carefully tapered and discontinued while monitoring for return of catatonia. After clearing of withdrawal, and improvements in psychosis and anxiety, a MoCA version 1 revealed a score of 16/30. Aricept was started at 5 mg nightly. A repeat MMSE and MoCA prior to discharge on hospital day 23 were in the normal range. On the day of discharge he no longer spontaneously expressed concerns for his penis retracting into his body but continued to believe this when asked. Occupational therapy assessed his ability to live independently. He was discharged to his home under the continuous observation of family caregivers and neighbors. Outpatient psychiatry and neurology appointments were arranged prior to discharge.

Background

The term “Koro” was borrowed from the Malay culture and refers to the appearance of a turtle when it retracts its head inside the shell. The diagnosis of Koro has been an issue of debate for more than a century. Phenomenologically, Koro had previously been assigned as a culture-bound syndrome geographically localized to Southeast Asia, Japan, and China. The first known reported case was in Guangdong, China in 1865. Several Indonesian cases were reported in the 1880s which established the diagnosis as an “exotic disease of Southeast Asia” [1] and is thought to have been responsible for the 1967 Singaporean Koro epidemic [2]. Indian and Indonesian epidemics of Koro brought additional attention to the phenomenon. Sporadic cases similar to Koro have appeared around the globe and over the past few decades the syndrome has been reframed to include both a culture-bound epidemic form and a non-culturally bound isolated form. This latter isolated form has been observed in numerous case reports across the globe and generally understood to manifest in the context of broader underlying psychiatric pathologies [3]. To our knowledge, this case is the first reported case of Koro delusion in a Hispanic male in the United States. Koro, a culture bound syndrome, is classically associated with men from Southeast Asia. The literature has also recognized rare situations of Koro-like delusions of two Greek men and has been noted to appear in women, specifically through beliefs of retracting nipples, breasts, and vulvas. The Koro-like delusion has also been seen in the context of mild neurocognitive disorder and other psychiatric illnesses.

Diagnosis

Based on more than 35 years of research on the topic, Chowdry (2020) states three symptoms must be present to diagnose Koro with high fidelity. First, the perception of acute retraction of the penis (or breast or vulva in females). Second, an acute panic-like reaction with both psychological and somatic manifestations. Lastly, an acute fear of impending danger, most commonly death (or sexual disability). The entire episode lasts from a few minutes to a few hours. The suddenness of the episode and the clinical picture described above constitute the culture-bound classical Koro. If in this triad of subjective symptomatology one of the components is missing, or if the retraction is chronic over a period of days or weeks with health concerns (sexual or somatic in nature) but without fear of impending death and acute anxiety attack, it is not classical Koro but either Koro-like symptoms or chronic Koro [4]. Koro-like manifestations call for thorough medical investigation so as to shed light on the etiopathogenesis and therapeutic implications. The present article reviews the clinical features, historical roots, cultural pathogenesis, and the occurrence of Koro in epidemic and sporadic form. Careful examination of the combined data reveals that a search for organic pathology, with emphasis on CNS involvement, is imperative in patients displaying Koro characteristics [3].

Over the years, attempts have been made to understand and categorize Koro, and it has been described as a depersonalization, delusional misidentification of the self [3]. Others have conceptualized Koro as related to body dysmorphic disorder, but may be a unique entity delineated by the type of anxiety, the singular focus on the penis, and associated rare behaviors [5]. Koro entered the DSM-IV in 1994 as a culture bound syndrome following studies of those who have suffered, mostly in China, since the 1960s [2]. In the DSM-5, Koro is included as an “other specified obsessive-compulsive and related disorder”

[6] and evaluation for other OCD symptoms is imperative. DSM-IV-TR differentiates the two disorders by Koro's brief duration, different associated features such as acute anxiety and fear of death, a positive response to reassurance and occasional occurrence of a pandemic. (DSM-IV-TR, 2000, p. 510) Koro can be differentiated from delusional disorder or cognitive disorder by onset and associated beliefs about etiology of the penis perceptions. Classification of Koro transitioned from a "regional issue to a universal formulation" based on three important events: Western reports tended to be comorbid with other organic brain diseases, mental illnesses, and substance use disorders. A large-scale epidemic without Chinese connections was also reported as well as a 1984 report on non-Chinese Western cases was published [1]. Edwards (1984) suggested classification related to true physiological retraction, panic due to real or imagined genital retraction, and culturally patterned somatization. Edwards suggested limiting the name Koro to cases restricted to the regional cases that would use such a name. Other cases may be termed "genital retraction". Cases may differ on retraction versus shrinking, change in shape or tone, loss of sensation, nipple retraction versus breast shrinkage, fear of death versus not associated with fear of death, urinary retention, or spiritual possession. Psychoanalytic conceptualization may or may not be related to castration anxiety [5] or may be related to other sexual conflicts [7] such as premonitory sex inadequacy, sexual promiscuity, guilt over masturbation, and impotence [8].

Other unique reports of Koro-like symptoms include delusions of inverted sex organs in the context of neurocognitive disorders and in adults outside of the classically defined culture group of males from Southeast Asia. There have been several sporadic cases in Western countries such as a case series of two Greek men with Koro-like symptoms described as a fear of the penis shrinking or retracting without fear of associated death [9]. There have been some rare "relapse mode" presentations and a case of a young male with schizophrenia experiencing this phenomenon [9]. Other Koro-like phenomenon reports have been due to mild cognitive impairment, [3], cerebrovascular disease [10] another psychiatric illness [11,10], organic brain disease [9], alcohol use disorder [7], and stroke [12]. Koro-like symptoms secondary to psychosis may be difficult to delineate [9]. Chronic Koro [13], lasting more than 10 years in two Indian cases, may be associated with poorer prognosis than more acute cases seen in Koro epidemics. Koro symptoms have been observed around the world, in families, and by proxy, typically with men concerned for their sons [1]. Some have concluded that culture-bound delusions outside of the classic Southeast Asian culture should not be attributed to the patient when other codable psychiatric illnesses may account for the belief [5]. Others argue that we should stop seeing culture-bound syndromes as geographically restricted and instead view this as a social disorder due to distortion of body-related beliefs [14].

Treatment

The treatment of Koro syndrome and Koro-like symptoms depends on its etiology. Treatment options for classic Koro may include positive reassurance. In some cultures, the episode may be accompanied by a preventive maneuver (by self or others) either by manual or mechanical means of pulling the penis outward to prevent retraction. Other treatments for Koro and Koro-like symptoms have included antidepressants, mood stabilizers, antipsychotics, brief supportive psychotherapy and extended psychotherapy [7]. In one case of comorbid "atypical

bipolar disorder", Koro symptoms persisted long after the mood symptoms were stabilized and only resolved after 15 months of frequent psychotherapy focused on resolving the patient's sexual conflicts [7]. Electroconvulsive treatments were successfully used to treat one case of Koro, in a patient diagnosed with a tumor in the genu of the corpus callosum. A short series of ECT brought about resolution of the koro symptoms [15].

Discussion

Koro is not a well understood psychiatric phenomenon, and careful description of clinical observations should continue to be collected. Within the context of mild cognitive impairment due to Alzheimer's Disease, clinicians may need to remain vigilant. Koro-like symptoms may herald a psychotic constellation, an important prognostic indicator, and signal increased likelihood of transitioning to Major Neurocognitive Disorder with concerns especially for Lewy Body Dementia [3]. The association with drug and alcohol use disorder needs further exploration as does clinical competency in screening for Koro and Koro-like symptoms [5]. Complications associated with Koro include psychosexual distress, self-injury, and injury produced by others [1].

Jilek in 1982 and 1986 cautions against Eurocentric and positivistic fallacies in psychiatric diagnoses. For instance, the fear of death due to penile retraction is particularly associated with Chinese cases, and may involve more than the typical Western anxiety around death. The penis is traditionally believed to absorb life force from the female and retraction is a harbinger of death [1]. There exists a tension between the universality of symptoms of mental illness and the reality that non-western countries may experience anxiety and trauma differently. The cluster of Koro-like symptoms and the highly specific culture bound syndrome may need to be kept distinct. The classically described culture-bound syndrome of Koro has been seen in Western societies and now in a Hispanic male in the Midwestern United States. Clinicians should remain vigilant of this and perhaps other culture-bound syndromes outside of the classically described population while balancing this with the fidelity of the rare diagnosis. Lastly, we like many Western authors, are likely limited in our understanding of the richness and complexity of the phenomenon.

Future research

Future research, for now, will likely rely on continuing to collect case reports on this rare phenomenon. The Greek man with the relapse mode presentation was concerned that symptoms were due to a virus living in his penis after having been with a prostitute 18 years prior. In another case there was a history of previously unknown sexual assault [9]. In our present case, due to being accused of sexual molestation, it could be that an underlying psychodynamic conflict resulted in the Koro-like symptoms which deserves further exploration. Lastly, there are frequent gender and/or sexual identity questions in these patients that are not well understood [9,5] and may be an area for further intersectional exploration.

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