Abstract

As a culture-bound syndrome, koro is described in the DSM-IV as “an episode of sudden and intense anxiety that the penis (or, in females, the vulva and the nipples) will recede into the body and possibly cause death.” Sometimes the syndrome may occur as an epidemic involving several hundreds to thousands of people within a short period of time. While the syndrome individually involves an anxiety reaction and fear of mortal genital retraction, it collectively takes on the form of epidemics and mass panic. Recently, a consensus has been reached about the fact that genital retraction is intimately related not only to ethno-cultural beliefs, but also to the dramatic expression of acute anxiety and fear of impending catastrophe or death. We present 2 cases of koro syndrome that experienced severe anxiety due to the feelings of genital retraction that raise questions about the cultural specificity of fears of genital retraction.

Key Words: Koro Syndrome, Anxiety Disorder, Culture-Bound Syndrome, Genital Retraction

INTRODUCTION

Until the late 1970s, koro seemed to be limited to the Asian male population and was virtually undetected in Western patients (Chowdhury, 1996). In the 1980’s, a series of reports of sporadic koro cases from different Western, Middle-Eastern, and African countries shifted the focus of koro nosology from being a regional issue to a universal formulation. This led to speculation that koro may not be a truly culture-bound syndrome (Bernstein and Gaw, 1990; Kovacs and Osvath, 1998; Stip et al., 2006; Witztum et al., 1998). While at the personal level the syndrome involves an anxiety reaction and fear of death due to genital retraction, at the collective level the syndrome takes on the form of epidemics and mass panic (Dzokoto and Adams, 2005; Mather, 2005). The difference between the personal and collective dimensions of koro implies another important difference in the etiological explanations of koro, i.e., the culture-bound etiology and the role of organicity or physiological contributions to koro (Chowdhury 1996). It is possible to make a distinction between primary koro (either sporadic or epidemic form), in which genital shrinking is the presenting complaint, and secondary koro, in which the presentation is comorbid with another psychiatric disorder (such as anxiety disorder, schizophrenia, depression), a disease of the central nervous system (Dzokoto and Adams, 2005; Kar, 2005), or somatic conditions, such as urological diseases, withdrawal from drugs, brain tumors, and epilepsy (Bernstein and Gaw, 1990; Earleywine, 2001).

Thus, some authors consider anxiety the primary disorder and consider the fear of genital retraction syndrome to be secondary; in fact, koro has frequently been associated with depersonalization and other syndromes in which anxiety is outstanding (Altame and Urrutia, 2004), and with a sudden alteration in body perception (Chowdury, 1996; Stein et al., 1991). There are many other definitions of koro, such as atypical psychosis, atypical somatoform disorder, panic disorder, and/or sexual disorder not otherwise specified. Others may even consider it a conversion reaction (Bernstein and Gaw, 1990).

Whatever cause(s) and manifestation(s) have been found in koro patients, it appears that there is a consen-
sus about the ubiquitous occurrence of severe anxiety. It is considered that genital retraction is intimately related not only to ethno-cultural beliefs, but also to the dramatic expression of acute anxiety and fear of impending catastrophe or death (Chowdury, 1996). From this point of view it is possible to say that there is no difference between feelings of heart palpitation and genital retraction fear. With all these arguments in mind, we present 2 cases of koro-like syndrome diagnosed with an anxiety disorder not otherwise specified. Both patients had not heard of this disorder, and thus we question the cultural specificity of fears of genital retraction.

Case Reports

Case 1

Mr. A is a Turkish 20-year-old male patient who was seen at the Psychiatry Department of our University Hospital in March 2006. One night while in an African country studying English, he experienced a sudden feeling of genital shrinking associated with the fear of death. He urgently went to the local emergency department holding his penis with the fear that it would retract into his body. He was given an antibiotic and an analgesic in the health center, but he did not feel well until returning to Turkey. Upon admission at our hospital his physical examination and laboratory evaluations were within normal ranges, and he was fully oriented and cooperative during his psychiatric evaluation. He appeared somehow relaxed and slightly anxious while being interviewed, and he complained of insomnia. He had continued worries about his fearful experiences related to his genital retraction. There were no psychotic features in his thinking process or content. His judgment and insight were intact.

He was the oldest of 5 children in a family living in southeastern Anatolia. The father, a businessman, was defined as a nervous man and the mother as an overprotective, modest Anatolian woman. He remembered that he was circumcised at age 5 and at the time he screamed for help. He started to masturbate at age 13 years and was not ashamed about it. He informed us that he never used alcohol or any other psychoactive substance, such as cannabis, known to be capable of inducing a similar clinical picture due to either intoxication or withdrawal. He had a positive family history of psychiatric illness. An uncle was diagnosed with depression and one son of another uncle with panic disorder.

He had normal physical and neurological examinations and we decided that he had an anxiety disorder not otherwise specified, and prescribed an antidepressant. One month later at his follow-up visit he reported that he used his medication regularly and felt very good, but he insisted that his previous experiences about his penis were real (April, 2006).

Case 2

Mr. B, a 36-year-old single Turkish male had gone to the emergency department of another hospital a few days earlier with the complaint of not being able to feel his penis at night. He masturbated to be sure that his penis was intact, but he did not feel it again in the morning and thought it was retracting into his abdomen. He rushed to the hospital with the belief that he lost his manhood. He was told that his neurological and physical evaluations were normal. During our interview (in April 2006) he mentioned that 3 months earlier he felt numbness in his arms and became so excited and anxious that he thought he was having a heart attack. He had accepted that he had a psychiatric disorder after he was referred to several health facilities, where he was diagnosed as psychologically ill.

He had 2 sisters and 1 brother. His father was a hardworking and emotionally distant manufacturer, and his mother an overly protective housewife. The father provided good opportunities for his education and he graduated from the most famous university in Turkey. Having completed his education, he felt obligated to work with his father and thereafter his behavioral problems, such as occasional but heavy drinking of alcohol, began. However, he maintained a regular work life and had a stable long-term relationship with his girlfriend until 5 years ago when he was sentenced to 6 months in prison for a financial crime. Two years ago he reportedly began to severely abuse alcohol immediately after he witnessed his niece fall to her death from the third floor of their building. He stopped drinking since the onset of his recent complaints (3 months ago) and had not experienced any withdrawal symptoms during this period.

He appeared slightly anxious and complained of insomnia during our evaluation. However, he was fully conscious and cooperative. His thought process was normal and it seemed that the fear of penile loss had disappeared, but he was worried about the recurrence of the experience. His judgment and insight were intact. He had a positive family history of psychiatric disorders; his older sister and an uncle were diagnosed with psychotic disorders. We diagnosed him as anxiety disorder not otherwise specified and prescribed an antidepressant. One
month later he said that he felt good and he did not have any signs of anxiety; but after taking the drug he had become more expressive than he previously was. Due to the behavioral changes, his girlfriend left him. Fortunately, he did not have any worries about his penis, although his anxiety related to his work persisted.

**DISCUSSION**

Although koro-like symptoms have been observed in many psychiatric or medical conditions, their etiology remain unknown. Psychodynamic explanations tend to emphasize the role of castration anxiety as an etiological factor for the fear of genital retraction (Yap, 1964). Some authors, in contrast, suggest that in koro, the fear of losing one’s penis may actually reflect the wish to lose it. Psychoanalytically, every psychic act has multiple meanings and, therefore, behind every fear there may be a wish. Thus, although the symptoms of the koro patient (anxiety, panic, fear of death, etc.) are distressing, they could be the result of sub-/unconscious wishes (Fishbain et al., 1989). Whatever causative factors play a part in koro syndrome, a severe anxiety with associated clinical features is usually the predominant clinical picture. Our cases also illustrate the occurrence of severe anxiety in 2 patients with koro syndrome that presented as panic. In most of the cases described in the literature, patients have also experienced considerable stress and anxiety before developing the syndrome (Sajjad, 1991). There were stressful life events for both of our patients that preceded the onset of symptoms (separation from his family and being lonely in an unfamiliar environment in Case 1, and being in prison for 6 months and witnessing the death of his niece in Case 2). Although the history of alcohol abuse in Case 2 might lead to confusion about the diagnosis, as koro is defined in terms of its phenomenological aspects we were interested in the clinical symptomatology of koro rather than its etiology, treatment, or course. Additionally, we do not know how the course might have progressed and whether the symptoms would have faded away without medication, since we treated both patients with antidepressants. However, it is obvious that in both cases, fear of genital retraction was not culture-bound nor did it occur in the context of an epidemic. We ruled out the possibility of any psychiatric or medical disorder, other than anxiety disorder, since: 1. They were fully oriented, 2. Physical examination and laboratory testing revealed no signs of a medical disorder, 3. They did not demonstrate any bizarre thoughts or behaviors, except for their genital retraction fears, 4. Their perceptions and thought processes were normal, and finally 5. The most prevailing characteristic of their clinical pictures was a sudden and severe feeling of anxiety.

When Van Brero first defined this disorder, he thought it was a peculiar manifestation of obsessional-compulsive illness. Subsequently, it has been classified under many categories, such as anxiety neurosis, conversion disorder, depersonalization disorder, atypical psychotic disorder, body-image disorder, etc. (Yap, 1964). However, there is a general consensus that the syndrome is similar to panic attacks or other well-understood anxiety states (Bracha, 2006). Given the questions surrounding the term koro, because of its specific cultural connotations and our findings, we may wonder whether genital retraction is one of many symptoms of anxiety rather than a specific symptom of the culture-bound koro syndrome (Kennedy and Flick, 1991). Therefore, the term, anxiety disorder associated with genital retraction fear, would be a more appropriate term that reflects the universal nature of the disorder (Man-Lun, 1999; Bernstein and Gaw, 1991). According to Bracha (2006), maintaining the description of these syndromes as culture-bound may prevent science-based treatment and may be stigmatizing. As such, it is reasonable to think of the presented cases while considering that koro-like symptoms are likely to be manifestations of a severe anxiety state (Bernstein and Gaw, 1990; Dzokoto and Adams. 2005; Cheng, 1996; Chiniwala et al., 1996). Nevertheless, understanding the complexity of culture-bound syndromes as expressions of distress requires comprehensive research, even though koro symptoms are manifestations of psychologically-based anxiety states, such as panic disorder and other central nervous system insults (for example, alcohol withdrawal) (Guarnaccia and Rogler, 1999). Further research in this area will help to integrate cultural and clinical knowledge and provide insights into issues of diagnostic universality and cultural specificity.

**REFERENCES**


Yap PM. Suk-Yeong or Koro–A Culture-Bound Depersonalization Syndrome.