Case Report

# Case Report on Koro-Like Syndrome in a Private Specialist Hospital in Port Harcourt, Nigeria

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## Abstract

**Background:** Modern description of Koro syndrome is known to be endemic among Chinese populations in Southeast Asia, although the condition was first known among people in Southern Sulawesi in Indonesia and is characterized by genital hyper-involution and fear of impending death. The aim of this study was to describe an uncommon condition in our area of practice – Koro-like syndrome in a young patient in a private specialist hospital in Port Harcourt Nigeria in May 2022.

**Methods:** A study was carried out using patient's case notes and presented as case report on an adult patient who visited a private hospital in Port Harcourt, the capital city of Rivers State, Nigeria.

**Results/Case Summary**: The patient was a 37-year-old private religious businessman, who presented at the Emergency Department of a private hospital in May 2022 with complaints of upper abdominal pain radiating to the chest and upper back, inability to sleep, palpitations, disappearing penis, feeling of something crawling on the head, hearing some sounds, all about 5months duration, usually preceded by aura of perceiving odour of blood. He had coherent speech, delusional thoughts, poor judgement, and lacking in insight. Other systems examination was unremarkable except for elevated blood pressure of 150/100mmHg, epigastric tenderness and a retracted penis. Patient had significant improvement with anti-anxiety medications.

**Conclusion:** An anxiety related disorder that was associated with strong conviction of genital retraction and fear of death is reported.

## Keywords

Koro syndrome, case report, private specialist hospital, Port Harcourt, Nigeria

## Introduction

Genital hyper-involution and fear of impending death are two features which characterizes Koro Syndrome[1]. It is a pathological condition in which there is severe anxiety with delusional idea that one's genitals will shrink into the body and lead to death[2]. Female sexual organ involvement like the nipple or vulva have also been mentioned in this disease[3]. Although the condition was first known among people in Southern Sulawesi in Indonesia, modern description of the syndrome is known to be endemic among Chinese populations in Southeast Asia[1,4]. Distinction has also been made between complete (Koro Syndrome) and the incomplete (Koro-like Syndrome) with the difference being the presence or absence of fear of impending death[2].

Attempts have been made to explain the Koro phenomenon with some diversity in the root cause. From the social science perspective, while addressing the genital-shrinking episodes in Ghana a researcher linked them to several social tensions prevalent in that society: political tensions, economic strain, overindulgence and religious strain, pervasive lawlessness, among others[5,6]. Belief in black magic and loss of identity in a complex

world has also been blamed for this illness[6]. There is no doubt therefore why the traditional explanation for this culture-bound disease condition regarded as "the spirit of the dead" without genital, coming in the form of a man to dispossess the living of his genitals[1,2,7]. Psychodynamic perspective views this disease in line of its associated castration anxiety, although this argument has been countered by a researcher citing four reasons[8]. Psychophysiological analysis of normal changes in the size of the penis e.g. due to cold, has also been postulated as a potential factor that may evoke a response in an emotionally labile individual[9]. Role of brain lesions: tumor of the corpus callosum and right temporoparietal ischemic lesions in its etiology has also been reported[10,11].

In the West African setting, an epidemic of genital shrinking was in public knowledge in six countries from January 1997 and October 2003, having some similarity with culture-bound koro disease described in South-east Asia[6]. Similar such conditions have been reported in other African countries[12-14]. Epidemic of magical penile loss was reported in 1992 in Western Nigeria at time of economic depression and often attributable to supernatural occurrence[15]. We have heard of cases of missing organ following interaction usually with a stranger, touch confirmation, accusation, and declaration of missing genitals. Such stories were reported in other cities in Nigerian and we have not found such formal report of occurrence of this disease condition in Rivers State in the literature[15,16]. The clinical course of culture-bound koro syndrome is typically self-limited, but in some cases it can be short-lived or take on a chronic or recurrent form, lasting from days to weeks, months or even years[17]. Occurrence of a rare disease condition in a highly religious and traditional society like ours merits reportage, especially as such cases of missing organs in the public space is often sensationalized, and sometimes unfortunate victims are mobbed. We therefore describe a case report of an uncommon condition – Koro-like syndrome in a young patient in a private specialist hospital in Port Harcourt Nigeria in May 2022.

## Case summary

***Clinical History:*** The patient was a 37-year-old man, who was married with children, and owner of a private business in Port Harcourt, Nigeria. He was a religious man of the Pentecostal denomination, who presented to the Emergency Department of the hospital in company of his son, at 4.40pm of the 18th of May 2022 with complaints of upper abdominal pain radiating to the chest and upper back, inability to sleep, palpitations, disappearing penis, feeling of something crawling on the head, hearing some sounds, all about 5months duration. The symptoms often began when he perceived odour of blood. He believed that he was "being attacked". He had been treated for malaria two weeks earlier. There was no history of seizure disorder, loss of awareness or consciousness. Also, no history of alcohol usage or substance abuse. There was no other remarkable information in the history.

***Clinical/Mental state examination:*** A young man who was fully conscious and pacing around, mottling some words of prayer, and occasionally bursting into loud episodes of prayers and shouting: "they cannot succeed", "I am feeling weak", "I will not die", "call my pastor for me". He would whisper silently to the doctor, as if unwilling for someone else to hear: "my penis is disappearing", "I cannot find my penis". He was obviously anxious, not pale anicteric, afebrile, no pedal oedema. He had coherent speech, delusional thoughts, poor judgement, and lacking in insight. The systems examination was unremarkable except for elevated blood pressure of 150/100mmHg, epigastric tenderness and a retracted penis.

***Laboratory investigations:*** Full blood count, renal function test and urinalysis done showed normal values. Requests made for urine toxicologic studies, upper gastrointestinal endoscopy, and brain CT-scan were unfortunately not done.

***Diagnosis:*** After review by our consultant mental health physician (Neuropsychiatrist), a diagnosis of Severe Anxiety Disorder (Koro Syndrome) was made to rule out schizophrenia; and stress-induced peptic ulcer disease.

***Treatment:*** At the Emergency Department, he was given 20mls of Gestid suspension (Antacid); intravenous diazepam 10mg, intramuscular chlorpromazine 100mg, intramuscular pentazocine 30mg, and intravenous omeprazole 40mg 12hourly for 48hours. He was thereafter reassured by the Neuropsychiatric physician and placed on tablet Haloperidol 5mg twice a day; tablet Amitriptyline 25mg mane, and 50mg nocte; tablet Artane 5mg PRN; and tablet Diazepam 5mg twice a day for three days.

***Outcome:*** Patient improved with the medications given and was discharged home after 72 hours of admission on two-week dosage of Haloperidol, Amitriptyline, and anti-ulcer medication. Patient was seen after two weeks on follow up and was in good state of health as evidenced by resolution of anxiety and delusional symptoms.

## Discussion

The society often show instinctive sympathy for the perceived oppressed, victimized, or under-privileged, and this is expressed in public reactions (utterances) and mass actions in response to perceived crime, even before the true nature of the crime is determined. This underscores the wisdom behind the saying that a suspect is considered innocent until proven otherwise[18-20]. However, and unfortunately though, some individuals have been negatively judged or maltreated through mass action as seen in some alarms of "missing genitals" raised in certain cases of Koro Syndrome[15,16]. In this report, our patient rather walked into the hospital to complain and seek solution to his problem, accompanied by his spiritual head (his pastor). The presenting symptoms were characterized by extreme anxiety and belief of shrinkage of genitalia, similar to those found in patient with Koro[2]. The age of onset of the koro symptoms in the patient is similar to that (20–40 years) observed in the epidemics[21]. The patient's strong conviction that his ill health is being inflicted by some persons in the family and place of work is in keeping with complex interaction of cultural, social and psychodynamic factors in predisposed personalities[22].

The patient exhibited some micro-psychotic features like fleeting delusional ideas with persecutory themes. These findings are supported by the view that individual Koro patients exhibit a symptom complex suggestive of major psychiatric conditions (i.e. psychosis or affective disorder)[23]. He had experienced exacerbation of symptoms after stocking his store with goods. Having limited funds reserve and not making commensurate sales from his stocks, he strongly believed that it was an attack from her neighbors who didn't want his progress. This informed his decision to seek for unorthodox form of treatment before presentation in the health facility. In West Africa, especially Nigeria, the onset of psychological disappearance of the penis is characterized by cue, flash, check and alarm, the cue is usually a touch, most often a handshake from an unfamiliar person[15]. This is not so in the index case, rather there was usually an aura-like symptoms like smell of stale food preceding the episode of illness. No episode of unawareness reported.

Some requested laboratory investigations could not be done when some improvement in patient's clinical condition was noticed, even three weeks after discharge from hospital. This suggests possibility of some financial strain in the family underlying the occurrence of this severe anxiety disease, buttressing the economic strain among others reported earlier as a possible reason for the disorder[5,6]. Although brain tumors have been reported in relation to the occurrence of Koro-like syndrome, and the patient was unable to do a brain computerized tomography scan to investigate this line of thought, it is rather unlikely in this patient. This reasoning is supported by the fact that following administration of psychotropic medications, and due psychoeducation of the patient, wife and other caregivers, favorable response was observed from first clinic visit, two weeks post discharge, with patient remaining stable in the subsequent visits.

The implication of the finding from this research is that favorable response is achievable with a high index of suspicion, right diagnosis, and treatment in the hands of appropriate professionals. Public enlightenment by agencies of government would go a long way to forestall unfortunate incidences of negative public actions against some persons perceived to have "stolen genitals". Ours is an isolated case, there may be other cases that have gone unnoticed. Exploring such occurrences in our practice in both public and private setting to unravel the burden of this disease is an area of future research.

***Limitations:*** Specific investigations like computerized tomography (CT) brain scan, Electroencephalogram (EEG) and urine toxicology screening test could not be done because of financial constraint.

***Ethical Considerations:*** The approval of the Research Ethics Committee of the Rivers State University Teaching Hospital was obtained before commencement of the study. A written consent was also obtained from the patient before making public our findings for public good.

## Conclusion

An anxiety related disorder that is associated with strong conviction of genital retraction and fear of death is reported. Psychosocial factors, cultural belief, religious doctrine, stout confidence in the native mystical powers, are present with varying mental condition. Furthermore, in Nigeria, it is often believed that individual genitals were stolen for ritual and occultic purposes. The index case suggests that koro can be recurrent, with a good prognosis. More information regarding this presentation and factors behind it are needed.

## Authors' contribution

***Concept:*** Ayodele O. Ayodeji, Rex Friday Ogoronte A. Ijah

***Design:*** Rex Friday Ogoronte A. Ijah
***Definition of Intellectual content***: Rex Friday Ogoronte A. Ijah, Ayodele O. Ayodeji
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***Data acquisition***: Rex Friday Ogoronte A. Ijah, Neenaadem J. Luba
***Data analysis:*** Rex Friday Ogoronte A. Ijah
***Statistical analysis***: Nil
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## Conflict of Interest
There was no conflict of interest

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