Case Report

Self-Mutilation of the Nose in a Schizophrenic Patient with Cotard Syndrome

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Cotard syndrome is a rare condition, which its main symptom is nihilistic delusion. Self-mutilation of the nose is also a rare condition, which has not been seen in schizophrenic patients with Cotard syndrome. A single case is presented here.

A 32-year-old woman who was diagnosed as having schizophrenia and believed that she was dead, cut the tip of her nose. She had no guilt feeling and described her act as a cosmetic surgery.

We try to explain how various symptoms that seem to be very far from each other could exist side by side. Misinterpretation of her face is suggested to be the starting point in her complex symptoms.

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Introduction

Cotard syndrome is known as the existence of some nihilistic delusions. Nihilistic delusion can vary in a large spectrum. In one side of this spectrum, the patient believes that he/she is losing his/her powers of intellect and feeling. In the most severe form the patient denies his/her own existence.[1]

Self-mutilation is a term in psychiatry, which indicates self damage without wishing to die. Self-mutilation may be observed in various psychiatric syndromes including posttraumatic stress disorder, borderline personality disorder, factitious disorder, and schizophrenia. It is more prevalent in women.[2] In schizophrenic patients, self-mutilation is more serious and somehow odd. In some cases it has special meaning for the patients. Auto-enucleation, that means self-mutilation of the eye, is one example.[3] Genital self-mutilation is another type of self-mutilation, which is almost always seen in schizophrenic patients.[4, 5] Self-mutilation involving the face and ears, including that of van Gogh syndrome, is another type of self-mutilation in schizophrenic patients.[6]

Here we present a schizophrenic patient with criteria for Cotard syndrome who mutilated her nose. We discuss her related symptoms as well.

Case Report

A 32-year-old woman from Kerman (capital of Kerman Province in South of Iran), who was single, unemployed, who had left school after the 10th grade. She was admitted to psychiatric ward for the first time. A few days prior to the admission, she had cut the tip of her nose with a sharp knife in the bathroom. Her nose was operated in plastic surgery ward, but she removed the stitches and picked up the graft (Figure 1). Then, she was transferred to psychiatric ward.

She said that she saw a nodule on the tip of her nose, which made her nose ugly and she wanted to remove that nodule for beauty. She felt no shame or guilt and looked happy when she was telling us her history. She reported no pain when she was cutting her nose. She also stated that this action was not sufficient for beauty and she had plans to remove her wrinkles with iron.

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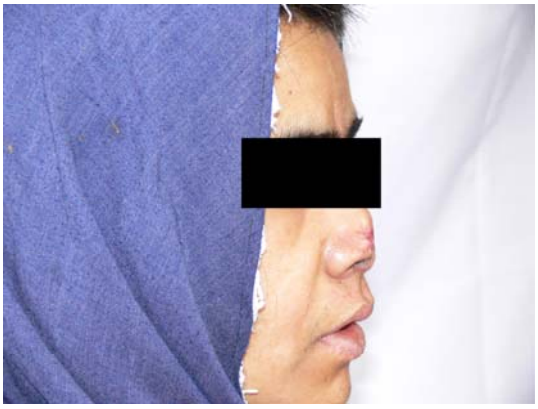

Figure 1. The lateral aspect of patient's nose after spontaneous repair.

She wished to become a prostitute or dancer in the future in order to make a lot of money. She also believed that she was pregnant and claimed that she swallowed several coins to abort the fetus.

She believed that several small collection of heroin and cyanide existed in her body, but they did not harm her. She reported that she saw two of those cyanide pools, which resembled to eyes, exactly below her eyes in the mirror.

She had delusional conviction of being dead because, as she claimed, she had killed herself and was only a soul wondering around in deserts and lavatories where other souls were living.

The exact time of the onset of her illness could not be determined, but we guess she was ill for a long time before cutting her nose.

In mental status examination, several delusions existed in content of thought and she had loosening of association in the form of thought. She had no insight and her judgment was impaired. On physical examination, there was a significant scar in her left breast because of previous self-cutting. Neurologic examination as well as brain computed tomography and magnetic resonance imaging were unremarkable. Because of her condition she received eight sessions of electroconvulsive therapy associated with 10 mg risperidone daily and was discharged with partial remission.

Discussion

Three models for explanation of self-mutilation in psychiatric patients are considered. The first is psychodynamic formulation, the second is anxiety reduction model, and the third is social learning theory.[7] None of these formulations can provide a reasonable explanation for self-mutilation in schizophrenia. Schizophrenic patients may respond to delusions or hallucinations or there may be more complex behavior such as what was reported in our patient.

Our patient felt no pain during nose-cutting. Review of the literature shows that schizophrenic patients are insensitive to physical pain associated with illness and injury.[8] Disturbance of body experience in schizophrenic patients occurs frequently and it may correlate with other mental disorders.[9] Two types of body disturbance including dysmorphophobia, and self-mutilation of the nose existed in our reported case. She also had symptoms of Cotard syndrome. To the best of our knowledge this combination has not been reported before. There are various reports of self-induced injuries to the nose in the literature. Self-induced nasal ulceration,[10] habit of picking crusted wound induced nasal alar necrosis,[11] and septal perforation due to nose picking (rhinotillexomania),[12] were the types of self-induced nose injury. There was no report of cutting the tip of the nose for beautification.

In a report from Japan, a schizophrenic patient resected his scrotum and both testes. He believed that these organs became necrotic.[13] This case history reminded us of Cotard nihilistic delusion.

Our patient believed that several collection of cyanide existed in her body, she had seen two of them on her face below the eyes when she was looking in the mirror. This part of history displays immortality in the patient. Every person knows that cyanide is a highly poisoning material, but our patient believed that she was not hurt by them. Besides, she felt her mirror image was somehow different from her real face. Misinterpretation of one's mirror image or misidentification as a stranger are considered to be a variant of Capgras syndrome.[14, 15] There are theories regarding the fundamental similarity between Cotard and Capgras syndromes. In Young's formulation,[16] which is best known and has been recently tested by McKay,[17] a damage to emotional component of the face recognition could be the first step in developing Cotard or Capgras syndromes. If it is internally attributed, it can result in Cotard syndrome and if it is externally attributed, it will result in Capgras syndrome.

Recognizing an ugly nodule in the tip of the nose, was the first step of patient's self-mutilation process. This stimulus is the point of association of her various symptoms including depersonalization, dysmorphophobia, nihilistic delusion, and misinterpretation of her mirror image. We should also consider that self-mutilation can stop the

depersonalization temporarily.[18] Schizophrenic patients also may use self-mutilation as a mechanism for overcoming paranoid-schizoid experiences.[19]

We have already reported two pervious rare cases of Cotard syndrome in recent years,[20, 21] but we think that there are too many points remained to be clarified in this syndrome.

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