Plica Neuropathica – a case report

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Introduction

Plica Neuropathica (Polonica) is a condition where the scalp hair in a localized area is compacted into irregularly twisted, irreversibly entangled plaits. It was prevalent in Poland in the 19th century, hence the name plica polonica or Polish plait. The term "Plica neuropathica" was first used by Le Page in 1884 to describe a case of sudden onset entangled hair in a patient with hysteria. He attributed the patient's mental illness to have predisposed and perpetuated the matting of scalp hair.

Review of literature

From Culture bound syndrome to an illness with multifactorial causation

As a Culture Bound Syndrome: From West to East: Plica Neuropathica is known by various names like Plica Polonica, Dreadlocks, Jataa in different cultures. As the name suggests, Plica Neuropathica (polonica) however is not limited to Poland and has been reported among various Cultures across the Globe. Interestingly it has been associated with different beliefs among different Cultures. It can be an expression of religious faith, a manifestation of ethnic pride or just a fashion preference. The dreadlocks first appeared on Egyptian artefacts. In the Old Testament (The tale of Samson and Delilah) a man's potency is directly linked to 'the seven his head'. Ras locks on Tafari **Empire** (Rastafarianism^[4]) sported dread locks as a protest when Ras Tafari, the emperor of Ethiopia was forced into exile during an invasion. In the West, the Nazarite is most widely known for developing Dreadlocks. Lately, Artist Bob Marley Sporting locks, prompted an international interest in the style and it became a fashion statement.

In the East, Vedic deity Shiva and his followers, The Yogis, Gyanis, and Tapasvis of all sects sport dreadlocks. It is termed as "Jataa" in Hindu religion^[5]. In India, all students on the spiritual path were directly enjoined by their scriptures to develop Dreadlocks as a means to detach them from physical vanity and aid them in the development of bodily strength and supernatural mental and spiritual powers.

Also both Eastern and Western Traditions hold that bodily, mental and spiritual energies mainly exit the body through the top of the head and the hair. If the hair is knotted, they believe, the energy remains within the hair and the body, keeping a person more strong and healthy.

Plica Neuropathica as a pathological condition

Physical to psychological predispositions: Various predisposing factors ranging from physical factors to infections and psychological factors have been associated with this entity. Frequent use of harsh shampoos, scalp hair infestations^[6] irritant contact dermatitis of the scalp^[2] Rupoid psoriasis^[7], pediculosis capitis and scabies^[4] have been reported to be associated with this condition. Recently cases of drug induced^[8] Plica formation and Plica in Paediatric^[9-10] age groups have been reported.

Psychological disturbance is one of the risk factor for plica formation. There have been case reports of Plica neuropathica in hysteria^[11-12], and Paranoid Schizophrenia^[13] from India. Though patients suffering from Disorganised Schizophrenia are vulnerable to develop Plica Neuropathica owing to their apathy and poor self care, there have been no reports in the literature about the same. We hereby present a case of Disorganised Schizophrenia with Plica Neuropathica.

The Case

Mr. A, 30 years, school dropout, belonging to lower socio economic status from Islamic community was brought to the Psychiatry OPD with the history of psychiatric illness of 15 years duration. Patient was apparently well till his 8th grade when he became irregular with the studies and his academic performance started deteriorating. Patient stopped going to the school completely and preferred to stay alone at home. Patients family members (daily wage labourers) did not consider this seriously as he had always been a below average student at studies. After a couple of years, he started developing symptoms like inappropriate smile, muttering to self and occasional irrelevant speech. He became more withdrawn, would indulge in little activity if any. His Sleep also got disturbed and self care gradually began to worsen. Patient was taken to many faith healers with little effect. Maintained likewise, for the next 4-5 years without treatment. He was taken for the first time for psychiatric consultation, when he began to be abusive and agitated. He was prescribed Haloperidol 5mg/day. He did not respond to haloperidol (except for his agitation) as his compliance with the medications was irregular and he dropped out of the

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follow up. After 5-6 years, in addition to the above symptoms, he began wandering and his self care worsened further. Started picking up rags and would sleep on the streets. During this period his family noticed that the patient hair got tangled and fowl smelled. Attempts by the family members to wash his hair failed, as he would become abusive. He was brought in this condition by the family members to the psychiatry OPD of our Institute. On Mental State Examination, he was untidy and ill-kempt. His hair was tangled and fowl smelling. There was inappropriate smile. His speech was irrelevant and scanty. Rapport could not be established. A Diagnosis of Disorganized Schizophrenia was made and he was put on Risperidone upto 4mg/day, Trihexyphenydyl 2mg/day along with Haloperidol 50mg depot Injection. Dermatology consultation was sought and a diagnosis of Plica Neuropathica was made. He was advised to cut his hair. During the follow up, his self care improved and wandering behaviour reduced.

Discussion

The exact etiopathogenesis of Plica Neuropathica (polonica) is not known. The predisposing factors range from physical factors, infections, allegies, drug induced to Psychological factors. The Psychological risk factors range from Neurotic illness like hysteria, anxiety to psychotic illness. The final common pathway seems to be poor care and neglect causing longitudinal splitting or weathering of hair shaft. Early identification and treatment of underlying psychiatric illness will prevent the formation of plica. Also, all the patients with plica should be screened by a Psychiatrist for detailed psychological evaluation.

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