

CASE REPORT

Plica neuropathica (polonica) in schizophrenia

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ABSTRACT

Plica neuropathica (Polonica) is a common but rarely reported scalp hair condition. In this condition the hairs of scalp in a localized area is compacted into irregularly twisted, irreversibly entangled plaits. Psychological disturbance is a risk factor for plica formation. We report a case of plica neuropathica in an adult female with schizophrenia.

Key words: Plica neuropathica, plica polonica, schizophrenia

INTRODUCTION

Plica neuropathica (polonica) is a rare acquired disorder of the hair shafts in which groups of hair are matted together forming a malodorous, encrusted and sticky, moist mass.^[1] First records of dreadlocks go back to 2500 BC with the dreadlocked Hindu deity Shiva and his followers reported in the Vedic scriptures of India as “JaTaa”, meaning twisted locks of hair. The term is probably derived from the Dravidian word “CaTai”, which means ‘to twist or to wrap’. Later, it was also described in Poland in the eighteenth century.^[2] It is also known as ‘plica neuropathica’^[3] or ‘dread locks’.^[2] Le Page coined the term ‘plica polonica’ in 1884 when he described a 17-year-old girl with a sudden onset of tangled scalp hair.^[1] Le Page attributed this strange phenomenon to “nerve force” while the parents of the child considered it a “visitation from God”.^[4] This phenomenon was historically linked to a common condition of scalp hair in Poland during the 19th century. It was characterized by fitting malodorous inflamed scalp usually heavily infested with lice.^[5] The hair was matted into a thick, moist mass, due to deficit hair care. The Polish custom of wearing tight fur caps and the superstitious belief that a lousy scalp was healthy contributed to the frequency of plica polonica in Poland.

Some of the risk factors reported for this condition are psychological disturbances, secondary scalp infection or

infestation of scalp or use of shampoos containing cationic detergents.^[6] There are sporadic reports of this condition in various dermatology journals from India^[1,7-10] and abroad.^[6,11] Surprisingly despite the role of psychological disturbance as risk factors for this condition only few cases are reported in psychiatry journals.^[1] This is perhaps the second case report from psychiatric point of view.

CASE REPORT

Mrs. A, 38 yrs old, Muslim, illiterate housewife hailing from low socio-economic rural background presented with eight months history of gradual onset problems characterized by persecutory delusion, auditory hallucination, fearfulness, irrelevant talk and decreased interest in household activities. Two weeks after the onset of the illness relatives took her to a mosque for religious treatment. One day after the religious rituals her relatives noticed sudden tangling of scalp hair in the hair lock on the vertex. After this formation she has not opened the hair lock or combed that part. However, she was oiling and washing the rest of hair regularly. There was no infestation with lice, secondary scalp infection or malodor. On asking, both patient and relatives expressed the concern that the hair lock should be removed only at the same mosque after the illness is completely cured. Further interview revealed that twenty years back she had a similar

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type of illness lasted for two months which was subsided after religious treatment in the same mosque. However there was no history of plica formation at that time. No history of mental illness was reported in the family.

Physical examination, hematological and biochemical parameters were within normal limits. She was admitted in the hospital for detailed evaluation and was diagnosed to have paranoid schizophrenia as per DSM IV criteria. Because of her odd hair condition dermatological consultation was sought and was diagnosed as plica polonica. During the period of inpatient stay of three weeks she was treated with daily dose of chlorpromazine 400 mg, trihexiphenedyl 4 mg and nitrazepam 10 mg on as needed basis. At the time of discharge patient showed remarkable improvement in the psychopathology except the odd hairstyle. Both the patient as well as relatives refused to comply with the therapist's instruction to cut the hair and were very keen to take her to the same mosque for removing the hair lock and to donate the same to God almighty. Three weeks later patient with relatives came for follow up in the out patients department. It was reported that she was taken to the same mosque where her lock was removed in a religious ritual and at the same time she was continuing the psychiatric treatment in the same prescribed dose. At the time of review her hair condition was perfectly normal and there was no obvious psychopathology except slight drug induced sedation.

DISCUSSION

Plica neuropathica has been reported very rarely though it is seen more frequently in our culture. This entity has been found to be associated more in women who are disturbed psychologically. This could probably due to the repeated manipulation of the hairs by the psychologically disturbed women.^[3,6] Hysteria was described as a prominent feature in five of the seven women previously reported with plica neuropathica. Unfortunately none of these reports are from psychiatry journals. In these patients plica neuropathica was characterized by sudden onset and a scalp healthy in appearance and free of offensive odour and parasites. In the previously reported case also by the same author plica was formed suddenly in a woman with schizophrenia diagnosis.^[1]

The scalp hair has been a prime target of superstitious beliefs. Plaited hair has been regarded as a safety valve in severe illness and, if a patient could 'raise' a plica, he/she would supposedly recover from the disease. This was exactly the explanation given by the index patient as well as in the previously reported case by the same author.^[1] Another belief is that clipping the plica could result in death.^[12] In the index patient psychiatric illness could be the prime factor for the development of plica. Otherwise there were

no predisposing or precipitating factors like kinky hair, febrile illness, or change in toilet soap or use of shampoos prior to the formation of plica. Moreover, as reported previously, the formation of plica was sudden and it was associated with a delusional conviction of superstitious belief shared by relatives. As it was suggested elsewhere^[6] plica could probably be produced by the application of tar, pitch or wax by those people in the mosque with faith in the statutory influence of a plica. However such a thing has not happened in the index patient. A remote possibility is that the patient, while sleeping or as an unconscious habit, could have produced this condition by vigorously rubbing together strands of kinky hair. Contrary to that the index patient was not having kinky hair. Bogaty and Dunlap^[13] described a laboratory method for matting hair and found that increased matting occurred with mechanical action, bleaching solution treatments and fine or dense hair. This process of matting is essentially similar to the felting of fibers familiar in the wool and textile industries. In conclusion the reason for the sudden development of plica in the index patient still elude.

In our culture it is a common religious custom to raise a plica for wish fulfillment or to have a divine image among the public. Once the desired goal is achieved they remove the plica in religious centers specifically set for these rituals. It would be worthwhile to examine the psycho-socio-physiological basis of this behavior, which may open new avenues in transcultural psychiatry. The authors would be interested to hear similar case reports from other clinicians.

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