

## PLICA NEUROPATHICA

Ashok Kumar Khare

An adult female who developed plica neuropathica following prolonged mental stress is reported because of the rarity of the disease entity.

**Key words :** Plica neuropathica, Mental stress.

Plica neuropathica is an uncommon condition characterised by irreversible tangling of the hair. The matted hair are to be cut off. While describing a 17-year-old girl with tangled scalp hair of sudden onset, Le Page used the term *neuropathic plica* for the first time in 1884. The parents of the patient considered it to be a visitation from God, while Le Page attributed it to nerve force at that time.<sup>1</sup> A few cases have since been reported. It has been found to be associated with psychologically disturbed women,<sup>2</sup> fever<sup>3,4</sup> or the use of shampoos.<sup>5-7</sup> Felting, the entangling of the free edges of cuticular scales, is the cause when there is lack of scalp care, whereas viscous fluid welding and electrical forces are also contributory when it is due to use of shampoos.<sup>8</sup> Bogaty and Dunlap<sup>9</sup> described a laboratory method for felting hair and found that increased felting occurred with increased duration of mechanical action, bleaching and waving solution treatments, and fine or dense hair. While reviewing the Indian literature on the subject, only one case report could be searched out.<sup>10</sup> Herein, a 20-year-old female patient who developed plica neuropathica after six months of continuous mental stress is described.

### Case Report

A 20-year-old female presented with localised areas of irreversibly matted scalp hair. It started six months back and was intermittent. Whenever it occurred, she had to remove the bunch of matted hair (Fig. 1) by cutting it. History of any mental stress, fever and use of



**Fig. 1.** A mass of tangled hair removed from the scalp of the patient.

new soap or shampoo was denied. She was using the same ordinary toilet soap, shampoo and coconut oil for her scalp since her childhood.

During her subsequent visits, it was noticed that her behaviour and talks were not normal and she appeared quite depressed. She refused to be seen by a psychiatrist and insisted that she is mentally normal. Further enquiry from her mother revealed that the patient has been continuously depressed since one year because the boy with whom she got engaged long back, broke the engagement without giving any reason.

From the Section of Skin and VD, R. N. T. Medical College, Udaipur-313 001, India.

She had been denying other proposals for marriage since then. Matting of the hair occurred only when she was too depressed.

The patient used to bring the removed bunches of matted hair with her. Neither these hair, nor those involved on scalp could be untangled from each other. The scalp was otherwise healthy. No one in her family suffered with similar trouble. The hair were normal on macroscopic as well as microscopic examination. Normal hair, when rubbed together did not show matting. The routine investigations were within normal limits.

### Comments

Plica neuropathica has been reported very rarely though it is seen more frequently. This is perhaps the second case report from India. The first case was reported by Hajini et al<sup>10</sup> from Kashmir in 1982.

This entity has been found to be associated with women who are disturbed psychologically. This case was an adult female who had been undergoing continuous mental stress for the last one year. She developed plica neuropathica after having undergone such a stress for six months. Since matting of the hair could not be produced by rubbing together the uninvolved hair, the mechanical affect is not likely to be the cause in this case. Also there was no history

of fever and change in toilet soap or shampoo. Because matting occurred only when she was quite depressed, it is believed that her hair problem was related to her mental status.

### References

1. Le Page JF : On neuropathic plica, Brit Med J, 1 : 160 (April 5), 1884, (Quoted from 2).
2. Simpson MH and Mullins JF : Plica neuropathica. Report of a case, Arch Dermatol, 1969; 100 : 457-458.
3. De Amicis, cited by Stelwagon and Gaskill : Diseases of Skin, 9th ed, WB Saunders Company, Philadelphia, 1923; p 1018-1020 (quoted from 2).
4. Ohmann and Dumesnil, cited by Jackson GT and McMurthy CW : A Treatise on Diseases of the Hair, Lea and Febiger Publishers, Philadelphia, 1923; p 286 (quoted from 2).
5. Howell RG : Matting of the hair by shampoo, Brit J Dermatol, 1956; 68 : 99 (quoted from 9).
6. Graham PV : Tangled hair, Arch Dermatol, 1953; 67 : 515 (quoted from 9).
7. Dawber RPR and Calnan CD : Bird's nest hair : Matting of scalp hair due to shampooing, Clin Exp Dermatol, 1976; 1 : 155-158.
8. Munro DD and Darley CR : Hair, in : Dermatology in General Medicine, Second Ed, Editors, Fitzpatrick TB, Eisen AZ, Wolff K et al : McGraw-Hill Book Company, New York, 1979; p 395-418.
9. Bogaty H and Dunlap FE : Matting of hair, Arch Dermatol, 1970; 101 : 348-351.
10. Hajini GH, Ahmed QM and Ahmad M : Plica neuropathica (case report), Ind J Dermatol Venereol Leprol, 1982; 48 : 221-222.