Plica neuropathica in severe reactive depression: clinical and trichoscopic features

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Abstract

Plica neuropathica (PN), also known as plica polonica, felting, matting or bird's nest hair, is an acquired hair condition in which hair becomes twisted, leading to the formation of a compact mass. Psychiatric disorders are an important etiologic factor for PN. We report a case of PN in a woman with severe reactive depression and present the trichoscopic findings.

Keywords: dermatology, dermoscopy, hair, psychiatry

Introduction

Plica neuropathica (PN) is an acquired hair condition consistent with sudden and irreversible matting of scalp hair [1]. Psychiatric disorders are an important etiologic factor for PN [2]. We report PN in a woman with severe reactive depression.

Case Synopsis

A 55-year-old woman was referred for the progressive tangling of scalp hair that could not be combed during the last month. Her medical history included severe reactive depression with psychotic symptoms and generalized anxiety related to the death of a first-degree family member. She was treated with sulpiride and benzodiazepines. She denied pruritus or pain of the scalp. There was no history of scalp dermatological conditions or changes in hair care such as shampooing prior to onset. However, she used to wash her hair three times a week, but in the last month she only washed it once a week because she was afraid of the problem getting worse. There had been no worsening from a psychiatric point of view. Examination revealed stiff masses of matted hair predominantly on the vertex and temporal area (**Figure 1**). There were no signs of parasitic infestations or poor hygiene. On trichoscopy, the compact mass showed 180º twisted hairs, retained telogen hairs, and honey-colored concretions mimicking "wrangled mesh of wires" (**Figure 2**). Diagnosis of PN was established and scalp hair was cut with complete resolution of the symptoms after a three-month follow-up (**Figure 3**).

Case Discussion

Plica neuropathica is a rare disorder in which hair becomes twisted, leading to the formation of

Figure 1. *Compact masses of matted hair predominantly on the vertex and temporal area.*

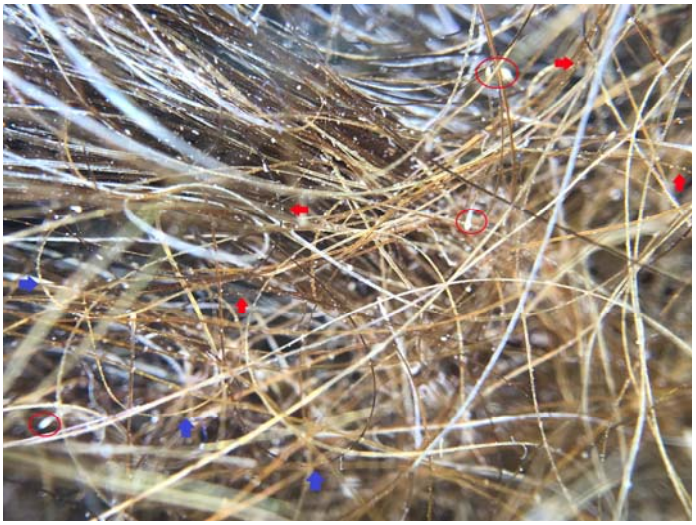

Figure 2. *Trichoscopy showed 180º twisted hairs (blue arrow), retained telogen hairs (red circle) and honey-colored concretions mimicking "wrangled mesh of wires" (red arrow).*

compact masses [1]. The term "plica neuropathica" was first described in 1884 by La Page to describe a case of sudden matting of hair in a patient with hysteria [2]. The pathogenesis is not well understood, but probably it is related to physical and chemical factors that damage hair shafts. The process of matting is similar to the phenomenon of felting used in wool and textile industries which consists of compaction of contiguous fibers exposed to friction and compression [1]. Multiple factors have been implicated in the etiology of PN such as use of shampoo or soap with cationic surfactants, infections and ectoparasitoses, neglect of hair, religious costumes, immunosuppressive drugs, and seborrheic dermatitis and rupioid psoriasis [1].

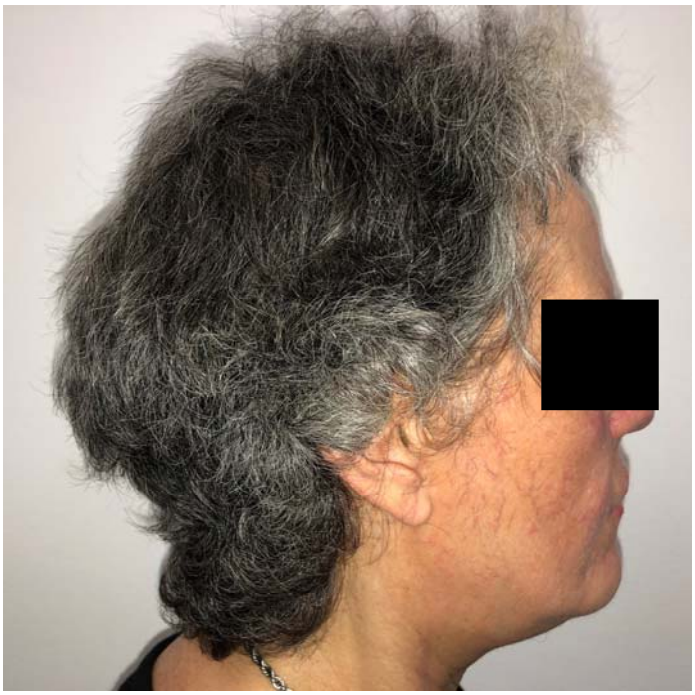

Figure 3. *Complete resolution after haircut.*

Psychiatric illnesess are a relevant cause of PN, but there are only a few cases reported in psychiatry journals. It is more frequent among psychologically disturbed patients probably owing to repeated manipulation of the hair [3]. It has been described in association with schizophrenia and autism [3,4]. We did not find any cases related to reactive depression in our literature research.

Trichoscopic characteristics in PN include bent and fractured hair shafts, trichorrhexis nodosa, retained telogen hairs, and 180º twisted hairs [5]. Our patient presented with the last two features. Moreover, the honey-colored concretions mimicking a "wrangled mesh of wires" that could be observed in our case had been described only once, to our knowledge, in association with PN [2]. The disorder is irreversible in affected hair and treatment consists of cutting the felted hair [1]. Manual separation with organic solvents with care to avoid toxicity can be useful in early cases [5].

Conclusion

Plica neuropathica is a hair disorder of multifactorial etiology in which mental disorders probably play an important etiologic role. Although diagnosis is essentially clinical, trichoscopy could support the diagnosis. Trichoscopic findings described to date are fractured hair shafts, trichorrhexis nodosa, retained telogen hairs, 180º twisted hairs, and honey-colored concretions mimicking a "wrangled mesh of wires."

Potential conflicts of interest

The authors declare no conflicts of interest

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