increased to 2 x 50 mg daily. The ulcers epithelialized in a ringworm-like pattern, and no new lesion appeared (Fig. 2). Unfortunately, the patient developed a toxic bone marrow hypoplasia, leading to pancytopenia, and the sulfasalazine had to be discontinued after 2 weeks. The healing continued by intensive antiseptic and granulation supporting therapy. The patient could be discharged in a stable condition without any lesions.

DISCUSSION

According to the clinical course, differential diagnosis revealed necrotizing vasculitis of the lower plexus, metastatic calcinosis, streptococcal necrotizing fasciitis and large cell-Ki-1-anaplastic lymphoma. Diseases known so far to be associated with dermatitis ulcerosa could be excluded. In particular, no leukemia or malignant lymphoma, often seen in the bullous type of dermatitis ulcerosa, could be diagnosed (3). One paper reports a 34-year-old woman with bullous dermatitis ulcerosa, who was free of symptoms for 7 months and developed acute myeloid leukemia accompanied by recurrence of the skin disease 12 months after diagnosis of dermatitis ulcerosa (4). This underlines the necessity of a long-term observation of the patient’s condition, including blood count. Septic courses, anaemia and affection of bone marrow are usually considered to have an association with leukemia (3), but in our patient anaemia and bone marrow affection could also be result of liver cirrhosis. Abnormalities in cell-mediated immunity, humoral immunity and chemotactic functions may play a role (4) and are even more likely in a patient with liver cirrhosis. As the patient, when admitted to our hospital, was in a septicaemic condition and had a history of pyelonephritis and disorder of coagulation, corticosteroids were not a therapeutic option (6). Because of the patient’s multimorbidity and the improved cutaneous status we hesitated to start another systemic therapy after discontinuation of sulfasalazine and limited therapy to intensive local therapy. Whether the severe pyelonephritis and herpetic gingivostomatitis, and a severe liver cirrhosis as well, were the initiating cumulative factors of the severe course of dermatitis ulcerosa has to be discussed. It has also been observed in association with active, chronic hepatitis (7) and diabetes (8). The clinical course of recovery without relapse of lesions despite of discontinuation of sulfasalazine supports the probability of an infectious cause. There is only one author who also observed associated infectious diseases such as sinusitis, tonsillitis and amoebic dysentery with complete healing after therapy of the infectious disease (9). Whether the liver dysfunction or the presence of infectious foci was the ultimate cause may be revealed by the follow-up of the patient.

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E. Weisshaar, R. Sabel and H. Gollnick
Department of Dermatology and Venereology, Otto-von-Guericke University, Magdeburg, Leipziger Strasse 44, DE-39120 Magdeburg, Germany.

“Twisted and Rolled Body Hairs”: An Ultrastructural Study by Means of Scanning Electron Microscopy

Sir,

Since the first description by Itin et al. in 1994 (1), no other cases of twisted and rolled body hairs have been described in the literature. The main characteristic of this hair condition consists in the presence of groups of hairs thickly interlaced and impossible to unite. We would like to present a new case in which an ultrastructural study by scanning electron microscopy (SEM) has been performed. The aim of this report was to investigate the ultrastructural characteristics of the hairs involved.

MATERIALS AND METHODS

A 52-year-old male patient complained of itching on the back. The patient was in good health and his anamnesis for dermatological diseases was negative. A single knot of hairs originating from different follicles was found in the sites of the itching and scratching, while the remaining parts showed normal body hairs. Abnormal hairs were plucked and studied by means of a Philips 505 scanning electron microscope. The fibre specimens were longer than 3 mm.

RESULTS

The SEM study allowed us to visualize the inner structure of the thick hair knot at the centre of the observed tangle. The most important abnormalities observed of the hair shaft were torsions resembling pseudo pili torti, plat-like figures (Fig. 1), flattening of the hair shafts partly due to mutual (reciprocal) contact and partly to forced bending. Multiple schistous due to sudden curvatures imposed by the thick knot of the hair shafts was present (Fig. 2). We did not observe any triangular hair shafts, as commonly reported in pili trianguli et canaliculi.
Fig. 1. Groups of hairs thickly interlaced, resembling plait. Textile fibres are present inside the plait (arrows) (× 132). Bar is 100 μm.

Fig. 2. Hair shafts with a ribbon appearance. Some sebistasis is present along the hair shafts (arrows) (× 97.2). Bar is 100 μm.

(spun-glass hair). The roots of the fibre specimens looked like normal hair. We found colonies of yeast in the bulbar region of some hairs (Fig. 3), and the same finding was observed along the hair shafts (Fig. 4). In the hair tangle we also found textile fibres.

DISCUSSION

Twisted and rolled body hairs are an unusual hair malformation, constituted by knots and twists of body hairs. They are considered an acquired defect, but a hereditary trait has been described and for this last possibility Itin himself suggested a modality of transmission with dominant autosom trait. The pathogenesis of this defect is not actually known. In the acquired form the most peculiar feature is the traumatic factor induced by scratching or rubbing, while in the hereditary form it is a bulbar anomaly known as ‘lanugo’. However, Resnik (2) considered twisted and rolled body hairs to be only an acquired defect. Differential diagnosis is with trichonodosis (knotted hair with single or double knot), rolled hairs (circle hairs) (3), pilo multigeminis (several matrices and papillae with separate internal root sheaths emerging from one follicle), felted hairs (tangling of scalp hair), powder puff hairs (knotted fibres of powder puff entwined with vellous hair). In our patient the hair anomaly revealed itself to be an acquired lesion, so we think that prolonged scratching was the origin of the anomaly. We believe that the presence of textile fibres tangling together with hair fibres could also be a consequence of prolonged scratching. Our patient usually wore cotton underwear. The normal participation of yeasts in the cutaneous flora, compared with the rarity of this defect, seems to make yeast unlikely as a causative factor.

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Dr. Mauro Barbareschi1, Dr. Erica Sibillo1, Dr. Franco Greppi1, Dr. Cinzia Brusca2 and Prof. Carlo Crosti2
1Institute of Dermatological Sciences IRCCS, University of Milan, via Pace 9, IT–20122 Milano and 2Department of Dermatology, S. Paolo Hospital, Milano, Italy.