Red Scalp, Trichodynia, and Scalp Burnout
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Red scalp was originally reported by Thstrup-Pedersen and Hjorth and commented by Moschella as ‘diffuse red scalp disease which can also be itchy and burning, is nonresponsive to therapy including topical steroids or antiseborrhoeic therapy’. Rebora et al proposed the term trichodynia for discomfort of the scalp. The conditions seem to be related. Since Willimann and Trüeb found a correlation of scalp telangiectasia with presence of scalp discomfort, an analogy was proposed to the observation that patients with telangiectatic rosacea respond more frequently with stinging sensations to topical application of 5% lactic acid on the cheeks than patients with papulopustular rosacea or normal controls. Eventually, the observation of red scalp with clinical and histopathologic findings consistent with rosacea suggest that a subset of patients represent a rosacea-like dermatosis. The cause of trichodynia remains obscure. The most prevalent speculations are: perifollicular inflammation, increased expression of neuropeptide substance P, and underlying psychiatric disorders. These findings suggest that blood vessels are of importance in stinging sensations, and a connection exists between sensory or subjective irritation and cutaneous vascular reactivity. Substance P represents an important mediator of nociception and neurogenic inflammation, and exerts a vasodilatory effect. By the virtue of their bidirectional effects on the neuroendocrine and immune systems, neuropeptides represent key players in the interaction between the central nervous system and the skin immune and microvascular system. Such mechanisms would explain the noxious effects of external stimuli and emotional distress on cutaneous nociception through release of neuropeptides. Finally, the burnout syndrome is defined as a condition of emotional exhaustion with reduced capacity, that is understood to represent a development line starting with enthusiastic idealism and leading through frustrating experiences to disillusionment, psychosomatic disorders, depression, and aggression. Just as the syndrome is not recognized to represent a true medical condition by the scientific community, but is rather defined as a coping problem in ICD-10, we encounter individuals in daily clinical practice with an analogous patient’s career with regard to the condition of the scalp, which represents rather a question of problem solving than a specific dermatologic condition. Therapy includes: avoidance of UVR exposure and of topical overtreatment, and use of topical witch hazel (hamamelis Virginiana) as shampoo and/or tonic, in refractory cases oral tetracyclines, and tricyclic antidepressants may be added. Efficacy of oral substance P antagonists (aprepitant) has not been convincing. Ultimately, treatment with botulinum toxin (BTX) seems a rational approach, since BTX decreases the mechanical sensitivity of nociceptors and inhibits neurogenic vasodilation through inhibition of sensory neuropeptide release.