

***Hamamelis Virginiana*-Based Scalp Care and Protection for Sensitive Scalp, Red Scalp, and Scalp Burn-Out**

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Red scalp was originally reported by Thestrup-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 antiseborrheic therapy’. Rebora et al proposed the term trichodynia for discomfort of the scalp. The conditions seem to be related.

The cause of trichodynia remains obscure. The most prevalent speculations have been: 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.

Since Willimann and Trüeb found a correlation of scalp telangiectasia with presence of scalp discomfort, eventually 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.

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, especially with alcohol-based, topical corticosteroids, and in refractory cases use of oral tetracyclines, or tricyclic antidepressants. 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.

Nonetheless, the choice of appropriate hair care products represents an important aspect in the management of sensitive scalp and related conditions. Since hair washing is the most common form of treatment of the hair and scalp, a shampoo must accomplish more than just cleanse. It should additionally be adapted to the specific requirements of different hair types, and washing habits, and most importantly, it should elicit a positive effect on problematic scalp conditions. With available high-quality *Hamamelis virginiana*-based hair care products, successful treatment of the scalp has become feasible, especially in the context of problems associated with red scalp, scalp burn-out, and the use of irritant topical minoxidil products for androgenetic alopecia.

Ref. Trüeb RM. North American Virginian Witch Hazel (*Hamamelis virginiana*)-Based Scalp Care and Protection for Sensitive Scalp, Red Scalp, and Scalp Burn-Out. Int J Trichology. 2014 Jul;6(3):100-3.