Recent years have brought significant progress in hair diagnostic techniques. Classic methods of hair evaluation, other than clinical examination, include evaluation of daily hair loss, hair weighing, pull test, wash test and the trichogram. Histopathological examination of the scalp skin remains an important method in differential diagnosis of hair loss, in particular in differentiating female androgenic alopecia from chronic telogen effluvium and in diagnosing alopecia areata or cicatricial alopecia. Newly developed techniques enlarge the spectrum of possibilities in diagnosing hair loss. These include the phototrichogram, trichoscan, trichoscopy and in vivo reflectance confocal microscopy. The basis for the phototrichogram is the observation that growing hairs are in the anagen phase and non-growing hairs are in the telogen phase. Subsequent macrophotographs of a shaven scalp area allow the percentage of telogen hairs to be assessed. A trichoscan is a computerized form of this technique. Another, recently developed method, trichoscopy (hair and scalp dermoscopy), allows evaluation of the whole scalp without the need to remove hair. Trichoscopy allows one to analyze hair thickness and structure, and the perifollicular area. In a recently published study, the usefulness of reflectance confocal laser scanning microscopy in diagnosing hair shaft abnormalities was documented.