

CLARIFICATION OF ANHIDROTIC, ANHYDROTIC, HYPOHIDROTIC AND HYPOHYDROTIC ECTODERMAL DYSPLASIA

There is much controversy about use of the words anhidrotic, hidrotic, hypohidrotic and hypohydrotic in reference to the Ectodermal Dysplasias. While some people may view a personal preference in the use of one word over the others, there are sufficient reasons to suggest that only one is correct. In order to resolve the controversy, let's start by looking at the meaning of the words:

Anhidrotic means no sweating - derived from the Greek words 'an' (none or negative) and 'hidros' (sweat)

Anhydrotic means no water - from the Greek words 'an' (none or negative) and 'hydro' (water)

Hypohidrotic means deficient sweating - from the Greek words 'hypo' (under in the sense of deficient) and 'hidros' (sweat)

Hypohydrotic means deficient water - you must have the idea of the Greek derivation by now.

A person who does not sweat at all could be said to be anhidrotic. Someone whose sweat function is diminished (sweats little in response to heat or in response to stress only) could be said to be hypohidrotic. Those who are partially or totally devoid of water (body fluids, etc.) could be said to be hypohydrotic or anhydrotic respectfully. Thus, there is no question about the correct word to use for those individuals with one of the Ectodermal Dysplasias with diminished sweating - it must be hypohidrotic, since no one is totally devoid of sweat function. I guess one could say that this is much ado about nothing, but precise terminology is critical to communication between families and their doctors.

Someone has suggested that there may be a relationship between the extent of decrease in sweating and the mode of inheritance. (Could it be that most X-linked recessives are hypohidrotic and most autosomal recessives are anhidrotic?) There is no evidence to suggest that this is the case. Of course, a female "carrier" of the X-linked form may show some signs of the disorder and have mildly depressed sweat function. She is hypohidrotic by definition, though her sweat function is not nearly as depressed as that of hypohidrotic male.

I hope no one has broken into a sweat trying to understand this! Suffice it to say that hypohidrotic (with an 'i' not a 'y') is the preferred term to use to describe those Ectodermal Dysplasias with diminished sweating.

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