Follicular Occlusion Triad?

"The follicular occlusion triad: (acne conglobata, hidradenitis suppurativa, and dissecting cellulitis of the scalp).

These diseases comprise a generic group. Though not usually classified together, there is reason to believe that they are variants of the same pathologic process, for there are marked clinical and pathologic similarities. The initial and central pathogenic event linking these conditions is an innate tendency toward follicular hyperkeratoses, leading to occlusion of the follicular orifice and retention of products normally escaping through it. The clinical features common to all three are: multiple comedo formation, abscesses with communicating channels, discharging sinuses, and healing with a marked tendency toward hypertrophic or keloidal scars. Furthermore, two or more of these disorders may coexist in the same person."


"The follicular occlusion triad refers to hidradenitis suppurativa, dissecting cellulitis of the scalp and acne conglobata. These three conditions constitute a form of deep scarring folliculitis: they are grouped together on the basis of their presumed common pathogenesis of poral occlusion followed by bacterial infection. The presence of draining sinuses is a further characteristic feature of this group."


What currently is known popularly as the "follicular occlusion triad" is said to consist of acne conglobata, hidradenitis suppurativa, and perifolliculitis capitis abscedens et suffodiens (dissecting cellulitis of the scalp). Those three inflammatory conditions are claimed to be centered about hair follicles, but, in actuality, they are based in infundibula, which are not follicles, but components of epidermis. Beneath each infundibulum and in continuity with it, resides a follicle that consists of an isthmus, stem, and bulb, in descending order.

Except for anatomic site, acne conglobata, dissecting cellulitis, and hidradenitis suppurative are indistinguishable from one another clinically and histopathologically. In none of the three, however, is there any evidence of occlusion either of follicles or of infundibula.

Before considering the subject of acne conglobata, a few lines should be directed at a phrase misleading and hackneyed that concerns the archetype of that disorder, namely, acne vulgaris, to the effect, that comedones are the *sine qua non* for diagnosis. The implication of the proposition is that plugs of corneocytes occlude widened infundibula, causing their wall to become thinned and breached eventually with leakage resultant of infundibular contents into the dermis, thereby setting in motion an inflammatory process that all too often is the bane of adolescence. A correlate of the cliché is that the finding of comedones allows acne vulgaris to be distinguished clinically from other types of acne, such as "steroid acne" and "acne rosacea." In actuality, comedones are not always present in acne vulgaris, and surely they are not requisite for development of the papules and pustules of that disease. Those lesions inflammatory, the points of concentration of which are infundibula, often develop in the absence of stoppers in the form of corneocytes arrayed compactly. In brief, occlusion of infundibula is essential neither to evolution of lesions of acne vulgaris nor to lesions of variations on that process pathologic, to wit, acne conglobata and acne keloidalis, as well as hidradenitis suppurativa and dissecting cellulitis of the scalp. Although comedones may accompany draining sinuses in facial lesions of acne conglobata and in axillary and inguinal lesions of hidradenitis suppurativa, they do not attend cuniculata of perifolliculitis abscedens et suffodiens. Parenthetically, retinoids are effective greatly in treatment of acne conglobata and hidradenitis suppurativa, but are not of benefit in management of dissecting cellulitis of the scalp.

In sum, not a shred of evidence exists to substantiate the thesis that the so-called "follicular occlusion" has anything to do with the
Peculiar names for the diseases under discussion here add to confusion about them. Conglobate means "gathered into balls," a reference to the vague resemblance of infundibular cysts of acne conglobata to balls of different sizes. The image, however, conveys no sense for the nature fundamental of the disease, to wit, a suppurative infundibulitis accompanied often, but not invariably, by comedones. Hidradenitis suppurativa truly is suppurative, associated as it is with pus that pours from sinuses created by attempts of infundibular epithelium to restore itself into neat funnels after having ruptured, but it is not related in any way pathogenetically to inflammation of eccrine or apocrine glands. Neutrophils that appear in the vicinity of those glands are mere emigrés from infundibula that have been rent. The analogue on the scalp of acne conglobata and hidradenitis suppurativa is neither a perifolliculitis (capitis abscedens et suffodiens) nor a (dissecting) cellulitis; from the outset, it is a suppurative infundibulitis that becomes more fulminant progressively. In time, it, like acne conglobata and hidradenitis suppurativa, deforms the skin grotesquely through changes sequential of fluctuant abscesses that in the dermis (and often the subcutaneous fat) become confluent to form warrens that eventually drain huge quantities of pus. Over the course of many months and years, the process tends to wane and resolve as peculiarly-shaped, heaped-up scars punctuated by widely dilated ostia of infundibula. This succession of events, common to each of the three maladies under consideration here, is not initiated by occlusion of infundibula by plugs of corneocytes.

"The pathophysiological development [of acne conglobata] is similar to that of hidradenitis suppurativa except that follicular occlusion causes rupture of sebaceous glands, whereas hidradenitis affects the apocrine glands."

"The common initiating event in the three diseases of the follicular occlusion triad appears to be follicular hyperkeratosis leading to retention of follicular products."

"Hidradenitis suppurativa (HS), acne conglobata and perifolliculitis abscedens et suffodiens form the 'follicular occlusion triad' or 'apocrine acne'."

[In "Hidradenitis suppurativa"] "...we now know that occlusion of the follicular infundibula followed by rupture of the follicles is the inciting event."

"Follicular occlusion triad is an umbrella term given to the three clinical conditions listed under 'Synonyms' [hidradenitis suppurativa, acne conglobata, dissecting cellulitis] whose pathogenesis is related to a disorder of follicles resulting in subsequent occlusion, inflammation, and destruction."