The Painful, Non-indurated Chancre

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Abstract. After reviewing 20 consecutive male patients with primary syphilis and 23 textbooks on venereology, it can be emphasized that the syphilitic chancre may be painful, and not indurated, and that the textbooks in some cases give a misleading description of the disorder.

Key words: Genital ulcers: Syphilis

Many textbooks on venereology simplify the description of the syphilitic chancre by saying presumably for didactic reasons that it is painless and indurated. The statement is misleading.

MATERIAL AND METHODS

Twenty consecutive male patients seen in 1977 for primary syphilis were reviewed. The diagnosis of syphilis was based on the finding of *Treponema pallidum* in dark ground microscopy of exudate from suspected ulcers. The description of primary syphilis in 23 textbooks on venereology was noted. They comprised six Danish, 9 English, 1 Norwegian, 1 Swedish, 6 Geman textbooks. One textbook was available in two editions.

RESULTS

Pain. Of the 20 patients, 5 had painful chancres, 1 of which was localized to the anus and 4 under the prepuce. One of the genital chancres was eventually found to be a chancre mixte.

Table I. *Description of the syphilitic chancre in 20 patients, as regards pain and induration*

Pain	
Painful	5[a]
Painless	5
Tenderness not noted	9
	20
Induration	
Indurated	11
Not indurated	7
Induration not noted	2
	20

[a] One chancre mixte.

Table II. *Statements in 23 textbooks in venereology concerning pain and induration*

Painless and indurated	3/23
Painless	10/23
Indurated	8/23

Induration. Seven of the 20 chancres were not indurated. Of these, 5 were localized under the prepuce and 2 at the anus. Six of the 20 chancres were multiple. In 13 of the 20 patients, the regional lymph nodes were enlarged. The results are tabularized in Table I.

Textbooks. Three textbooks stated categorically that the primary chancre is painless and indurated. Regarding at the description of tenderness, 10 books stated that the chancre is painless, 5 did not mention pain and 8 books made the reservation that the chancre could be painful, especially when secondarily infected. Eight books stated that the chancre was indurated and 15 made reservations concerning the presence of induration. Table II shows the results.

COMMENTS

The textbooks with a categorical description of the syphilitic chancre are misleading for the medical student and the inexperienced doctor, as he will be led to expect the chancre to be painless and indurated, and he may therefore miss cases of primary syphilis and perhaps treat the ulcers with an ineffective dose of penicillin or tetracycline, which will mask the syphilitic infection. Two of the textbooks deserve particular mention. In one, the Textbook of Dematology (2) Lomholt, in his chapter on syphilis, changes his description, stating in the first edition that the chancre is painless, while in the second edition he wrote: "It is generally stated that the syphilitic chancre is painless in contrast to the primary lesion in chancroid, but in fact the patients often find the clinical examination painful."

The other eminent textbook is by Haxthausen (1). After describing the variation in the clinical picture of primary syphilis he continues: "The above described symptoms of the primary lesion in syphilis is not always to be expected. The rather schematic conception of these symptoms, which is still seen in many textbooks, is highly influenced by the description in the older literature."

REFERENCES

1. Haxthausen, H.: Kortfattet lærebog i hud- og kønssygdomme. Munksgaard, Copenhagen, 1950.
2. Lomholt, G.: Syphilis, yaws and pinta. *In* Textbook of Dermatology (ed. R. Rook, D. S. Wilkinson & F. J. G. Ebling, 1st and 2nd ed. Blackwell Scientific Publications, Oxford and Edinburgh, 1968 and 1972.

Treatment of Acne Vulgaris with Topically Applied Erythromycin and Tretinoin

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Abstract. A twice daily application of 2% erythromycin base in a hydroalcoholic solution accompanied by once daily use of 0.05% tretinoin (retinoic acid) solution was substantially more effective than tretinoin or erythromycin alone for treatment of inflammatory acne of moderate severity. Therapeutic enhancement by this combination can be attributed to the different modes of action, erythromycin acting chiefly by suppressing *Propionibacterium acnes*, while tretinoin is comedolytic. In addition, by altering the horny layer barrier, tretinoin doubtless increases the penetration of erythromycin.

Key words: Acne vulgaris (inflammatory); Treatment combination; Topically applied erythromycin; Tretinoin

For many years, oral antibiotics, chiefly tetracyclines and erythromycin, have been a mainstay for keeping inflammatory acne under control. Though not beyond argument, the therapeutic benefits derive from the suppression of *P. acnes*, an anaerobe which produces comedogenic substances and various "toxins" that contribute to the rupture of comedones (3).

It was logical to search for bacteriostatic substances that might have the same therapeutic effect by topical application, thus avoiding the risks of systemic use, modest though these have been. This aim was long thwarted. We failed to demonstrate worthwhile improvement with a variety of familiar topical bacteriostats, including the antibiotics choramphenicol and tetracycline. Insufficient penetration is the likely explanation for the feeble showing of otherwise potent antimicrobial substances. Most antibiotics in clinical use are in a form very unsuitable for diffusion into skin, that is, they are water-soluble, polar salts (neomycin sulfate, for example). At last we found that 2% erythromycin base in equal parts of water and ethanol was as effective in acne vulgaris as was oral tetracycline (9). Fulton & Pablo (1) had observed that a variety of erythromycins could reduce the free fatty acids (FFA) of the surface lipids when applied topically, the effect being proportional to lipoid solubility.

Further experience has convinced us of the feasibility of effectively using topical antibiotics in the management of acne. As expected, existing open and closed comedones are not affected, for antibiotics do not have exfoliant or comedolytic properties. Comedolytic agents interfere with comedo formation by preventing horny cells from sticking tightly together. Tretinoin (Vitamin A acid) is the most powerful of these (8). Since the modes of action of tretinoin and erythromycin differ so completely, the one lessening the cohesiveness of horny cells, the other suppressing bacteria, one can anticipate enhanced therapeutic benefits from the combination of the two. We showed previously that the combination of topical tretinoin and oral tetracycline was more effective than either alone (10).

We now report that this holds equally well for the combination of tretinoin and topical erythromycin.

MATERIAL AND METHOD

Four groups of 20 subjects, each with papulo-pustular acne of moderate severity, were studied. Acne conglobota cases were excluded as well as those with dominantly non-inflammatory, comedonal acne. The average age was 16½ years. There were 45 males and 35 females, 68 whites and 12 blacks.

The first group received 0.05% tretinoin solution (Retin-A® Johnson & Johnson) once daily before retiring. The second applied 2% erythromycin base (ethyl alcohol water, 1 : 1) once in the morning and again at night. The third group also applied erythromycin twice daily but tretinoin was added just before bedtime. The control group used the ethanol–water vehicle twice daily. The patients washed with a nonmedicated soap (Purpose Soap, Johnson & Johnson) two to three times daily and used no other medication.

The erythromycin solution was prepared freshly every 2 weeks, since the base form is not stable over long periods of time. The patients were seen at 2-week intervals during the 8-week treatment period. Papulo-pustules and comedones were counted on one side of the face at the begin-