

# Trichloracetic acid in Dermatology.

By

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Trichloracetic Acid, a somewhat time-honored and generally employed remedy in nose and throat practice, has received relatively little favorable notice as a therapeutic agent in Dermatology. This observation appears to hold equally true for both European and American practice, for the reason that it has thus far received but slight mention in both journal and text-book literature. A few authors touch lightly upon the subject, and limit their expression, for the most part, to the statement that it is one of the many efficient agents which can be topically applied for the successful removal of *verruca vulgaris*.

Alfred Lanz<sup>1)</sup>, in an article in the *Monatsheft für praktische Dermatologie*, in 1891, on the topical application of 20 % of trichloracetic acid by means of the endoscope in chronic urethritis, refers in an incidental way to the success which attends the local treatment of papillomata, warts, pigmentations, etc., with the same remedy.

The writer has used the agent for many years, but until recently, only in the form of 10 % to 20 % solution, as one of the most efficient topical remedies for the local treatment of mercurial stomatitis. During the past six months, he has employed it with marked success in the form of a saturated

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<sup>1)</sup> Alfred Lanz, *Monatshefte für prakt. Dermatologie*, Vol. XIII, p. 271, 1891.

watery solution in a relatively large number of dermatoses. The solution used for the purpose is obtained by taking an ordinary one ounce vial (30·0) of the crystals of trichloroacetic acid and adding a little water, a few drops at a time, until the crystals are well coated with a layer of liquid. This liquid is then applied by means of small wood applicators, or tooth picks, the free ends of which are previously wrapped with tiny pledgets of cotton, directly to the surface which requires the attention. A single application in the form of a thin coating, is all that is generally required for small superficial lesions, whereas larger, more elevated or deep seated ones, which necessitate a more pronounced reaction, require two or three repeated coatings, and often one or more repeated applications at seven to fourteen day intervals.

The property of Trichloroacetic Acid to efficiently precipitate albumin, makes it one of the most delicate tests which we possess for the detection of this substance, and its efficacy in this direction has been recognized and pointed out by Bettman and Schroeder<sup>1)</sup> in their monograph on gastric secretions. The virtue of this property to efficiently precipitate albumen by direct contact, impressed the writer that trichloroacetic acid could be most advantageously employed for the destruction and removal of exuberant and pathogenic cell tissue. Its application was limited in the beginning to such hypertrophies as small warts, moles, etc.; its circumscribed and well tolerated action, marked efficacy and excellent cosmetic effect, induced the writer to extend its use to some of the refractory infections of the skin, such as lupus erythematosus, lupus vulgaris, Paget's disease of the nipple, etc., with apparently good immediate results, but in cases that have been observed, too short a period of time to warrant for the present, a definite expression of opinion.

#### **Moles and circumscribed pigmentation.**

The remedy has been employed with uniformly gratifying and successful results in moles and small circumscribed pig-

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<sup>1)</sup> Bettman and Schroeder. Med. Record. Oct. 31. 1903.

mented nevi. These lesions have heretofore been removed by electrolysis by the writer, a method which has always been attended with good success. Small lesions could be entirely removed by electrolysis with excellent cosmetic results usually in one sitting, but is is a method that is always attended with tedium, and is entirely too time consuming for a busy consultation hour. Concentrated trichloroacetic acid removes these small hypertrophies quickly and efficiently with equally good cosmetic results. Small superficial lesions require but a single coating, the larger ones several repeated coatings, until the mass is shriveled and contracted to a small, firm nodule. The lesions dry in a few days to superficial crusts or scabs, which fall away in the course of seven to ten days, and leave temporarily reddened or pigmented surface, which soon takes on a normal character without any trace of cicatrization or disfigurement. The remedy has been employed, with equally gratifying results, to warty and hairy nevi of larger dimensions. In papillomatous nevi, the application is often followed first by the destruction and removal of the central portion of the growth, with a crateriform preservation of the border, which requires further application.

#### **Vascular Nevi and Telangiectases.**

The remedy has been applied with equally successful and gratifying results in selected cases of vascular nevi. Care was exercised in selecting only those forms where the nevus was of superficial and not deep seated character, and in cases where the telangiectasis affected only the more superficial vessels of the corium. Two applications successfully removed a somewhat widely distributed nevus on the right shoulder of a four months infant, on whom Carbon Dioxide Snow had been previously employed with only partial success. In addition to other cases of similar nature, it has been successfully employed for the telangiectases of nevi aranei, and those secondary to acne rosacea, and X-ray burns.

#### **Warts and Pipillomata.**

The writer merely wishes to confirm the already long established but not too generally recognized efficacy of tri-

chloracetic acid in the successful removal of warts and papillomata. The tedious and time-consuming electrolysis, has been his chief recourse in the past for the successful treatment of these anomalies. All forms, verruca vulgaris (filiformis, digitata, and acuminata), have yielded readily to topical applications of concentrated trichloracetic acid. It has proven to be a particularly gratifying agent in the successful treatment of verruca vulgaris around the finger nails, a condition not altogether uncommon in our American cities, and attributable, in a measure, to infection at the hands of manicurists. These warts are difficult and painful to remove by electrolysis, and in the authors's experience, are quite refractory to other forms of treatment. Another affection not altogether uncommon in America, termed infectious warts of the feet, responds favorably to the remedy. These lesions are warty in character, and consist of a crateriform cavity which contains a large pearly epithelial cencretion imbedded in the corium. The lesions are but slightly elevated, and faintly warty in appearance. They are often erroneously diagnosed as soft corns. They are infectious in character, multiply rapidly and are exceedingly painful to touch or pressure, rendering locomotion exceedingly irksome, if not impossible. The writer has been obliged in the past, to excavate the contents of these lesions under local cocaine anesthesia, by means of a curette, and destroy the base with the actual cautery.

A few repeated applications of trichloracetic acid effects the desired result.

As already intimated, the agent has also been used in several other dermatoses, with immediate favorable result, notably lupus erythematosus, vulgaris, Paget's disease, etc. These are affections which respond notably well to many departures in treatment, and require a prolonged and careful observation before a definite expression can be justly rendered. The writer merely wishes to intimate that the remedy seems to possess peculiar and well adapted properties of localizing character, with a probably wide range of possibilities. This preliminary report is limited therefore to certain definite, established properties.

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