

## Anthralin Stick (Anthraderm®) in the Treatment of Mosaic Warts

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Thirty patients having mosaic warts of the soles for 2 years (range 3 months–6 years) were treated daily with a wax-based anthralin stick supplemented by weekly paring. Six patients dropped out, because they failed to appear for follow-up. Of the remaining patients 17/24 cleared, whereas the warts persisted in 7/24. Although the trial was an open study, this result can hardly be explained by placebo effect since mosaic warts are notoriously resistant to treatment. *Key words: Dithranol 2%; Open clinical study.* (Received August 23, 1985.)

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Flindt-Hansen et al. (1) found a 2% anthralin stick (Anthraderm®, pHarma-medica) effective against common warts when used for a period of 2 months and ascribed it to its antimitotic properties. We have applied the same treatment to mosaic warts exclusively, because they are characterized by their longevity and their resistance to treatment (2, 3).

### MATERIAL AND METHODS

Thirty consecutive patients with mosaic warts were included in the study, provided they could accept the terms of the "informed consent" required by the county committee of medical ethics. Some were already under treatment, some were new referrals.

The patients were asked to pare down the warts after a soap-water soak once a week and to apply the anthralin stick confined to the warts every evening. The anthralin stick was supplied by the clinic in order to allow some estimate of non-compliance of the treatment.

The patients were seen at the clinic once every one or two months for a maximum of 10 months. Photographs were taken once every two months.

### RESULTS

Among the 30 patients 17/24 cleared within ten months. In 7/24 the warts persisted. The remaining six patients dropped out as they did not return for continued treatment. No patients cleared in less than three months. The median period of treatment was 7 months (range 3–10). The median length of history was 2 years (range 3 months–6 years), and this figure seems to be the same for those who did not respond to the treatment and those who failed to appear for assessment. Apart from staining of the bedlinen no side-effects were noticed. No anthralin burns were observed.

### CONCLUSION AND DISCUSSION

Daily application of anthralin stick 2% in a wax base supplemented by weekly paring cured 17 of 30 mosaic warts of the soles within 10 months (median 5 months) although the median length of history before treatment amounted to 2 years.

A double blind trial using anthralin is impossible due to the staining properties of the active substance. As a consequence it cannot be determined whether the cure was due to the wax base, or the anthralin, or to spontaneous resolution. Treatment of alternative

patients with Anthraderm® and a dummy wax stick for 10 months is not acceptable to the Danish Health Insurance.

The satisfactory result of treatment could hardly be due to psychotherapeutic factors. The reader will realize how difficult it is to feign enthusiasm about any new modality in the treatment of mosaic warts.

#### REFERENCES

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