# LONG TERM PROGNOSIS OF CHRONIC PARONYCHIA

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Chronic paronychia has been studied by several investigators both with regard to etiology and treatment. The short term results of various forms of treatment have usually been rather good (1, 2, 3, 7, 8, 9, 10, 11, 14). As far as we know, however, there are no reports on its long term prognosis. Cases with a duration of the disease of 30 years have been reported (12). This strengthens the clinical impression that the duration of this disease can be quite long.

The effect of pimaricin ointment on chronic paronychia in 19 patients was reported 1964 (5). In 6 of them a complete cure was seen after an observation time of 3 to 12 months. In 9 patients good immediate results were obtained, but recurrences were noted when the treatment was stopped. No effect was seen in the remaining 4 patients.

The present investigation comprises a follow-up study of patients seen in 1963–64 and also of patients with chronic paronychia visiting the clinic in 1961–63 and 1964–65. Our aim was to obtain information on the long term prognosis of treated chronic paronychia.

## Material and Methods

A questionnaire was sent to all patients with chronic paronychia seen in the clinic during the years mentioned above. In the present context chronic paronychia is defined as having lasted for at least two months. Out of 62 patients 44 answered the questions (70.9 %). It is known that

of the others one had died; ten questionnaires were returned marked "address unknown". During parts of the years 1963–64 the patients were treated with a primaricin ointment. The treatment during the rest of the period varied somewhat, but most of the patients were given nystatin ointment and a few Castellani's paint. The observation time varied between 3 and 7 years. The age distribution of the patients is seen in Figure 1. All patients except one were females. The male was a married locomotive engineer without excessive exposure to wet work.

#### Results

The results are presented in Tables 1 and 2 Thus 43 per cent of the 44 patients remained free from paronychia throughout the observation period; 41 per cent healed periodically, and 16 per cent had continuous trouble. The findings do not permit any conclusions concerning possible differences in the effect of the various treatments.

Most patients had household work either as their sole occupation or parallel with other occupational activities. Only two patients stated that they had changed occupation. However, a gradual change of the character of the work, primarily in the degree of exposure to water, was indicated by some patients in the higher age groups. Contact with water had been avoided among patients with continuous paronychia, but usually not in the healed group (Table 2).

<sup>&</sup>lt;sup>1</sup> Pimafucin®, Mycofarm Delft, Holland.

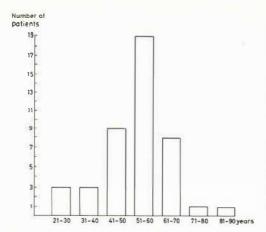


Fig. 1. Age group distribution of 44 patients with chronic paronychia.

Table 1. Results of treatment of 44 patients with chronic paronychia. Observation time 3-7 years

Treatment	Completely healed	Periodically healed	Never healed
Pimaricin	12	8	5
Other	7	10	2
Total	19 (43	%) 18 (41 %	7 (16 %)

Table 2. Contact with water in different healing groups

	Avoided water	Did not avoid water
Never healed	6	0
Periodically healed	6	II
Completely healed	2	17

Material for culture of *C. albicans* was taken from 33 of the 44 patients and growth of the organism was found in 20 of them. The positive cultures were equally distributed among the different groups of healing.

### Discussion

The age and sex distribution shows a clear predominance of women above forty years of age. This is in accordance with previously reported results (4, 11). The reason for this distribution pattern is unknown.

The pathogenetic significance of *C. albicans* is still being discussed. Some authors believe it is the cause of all chronic paronychias (4, 6). Others consider *C. albicans* as a secondary invader, taking advantage of the favourable surroundings offered by the nail fold, especially if kept wet (13).

In our patient series, positive Candida cultures were found in 20 of the 33 patients from whom cultures were prepared. Marten (6) and Stone and Mullins (12), were able to recover the organism in more than 95 per cent of the cases. This difference might possibly be explained by the less interest paid to the collection of material in our clinical routine work in comparison with that in the prospective studies of the other investigators, where the objective was demonstration of the presence of the organism.

The rate of healing in our patients is derived from patients treated with anticandidal agents. As we had not established a control group of untreated patients we do not know how the treatment influenced the disease. Only 19 of 44 patients (43.2 %) remained healed during the entire observation period, indicating that treatment used was far from ideal.

Shrank *et al.* (11) have reported an interesting double blind study in which they attempted to determine the significance of infection in relation to care of the nail folds. They showed that treatment with placebo solution healed the paronychia as often as hydrocortisone lotion and antimycotic lotions with or without concomitant corticosteroids. The infective component thus seemed to be of little importance in their patient series. They obtained a cure rate (observation time "at least a year") as high as 83.8 % (26 out of 31 patients), obviously as a result of good "nail fold care".

### SUMMARY

The long term prognosis of chronic paronychia was studied in 44 patients given various treatments. Most of them were housewives between 45 and 60 years of age. After an observation period of 3 to 7

years, 43 per cent of the patients remained healed, 41 per cent had periodically been without signs of paronychia and 16 per cent never healed. Patients with persistent paronychia avoided wet work and contact with water, in contrast to most of the healed patients.

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