

RESEARCH REPORT

TWO HUNDRED CASES OF SCABIES IN GENERAL PRACTICE

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I never saw scabies as a medical student, but I learned that it was a disease associated with dirt, poor standards of living and low mentality, usually attacking the skin of hands and wrists. In *The Story of Scabies* Friedman¹ says that men are more frequently attacked than women in the ratio of from 2.5 : 1 to 12 : 1, the higher rates being found, as in wartime, where numbers of men must crowd together. He regards scabies as a disease of overcrowding, dirt and low income, and tending to diminish as conditions improve.

I did not, therefore, expect to see many cases in general practice. After encountering several cases of intractable itch that cleared up, much to my surprise, with benzyl benzoate, I began to take more interest in scabies, especially as there was some correspondence in the journals at that time (1956-7). Dr F. F. Hellier² of Leeds had noticed an increase in cases of scabies at his clinic, and Dr Margaret McGregor³ had found that benzyl benzoate cured many children with reputed "heatspots". References to scabies in the literature were not very helpful, dealing mainly with individual outbreaks in institutions or among troops. Epstein⁴ (1955) sent out a world questionnaire from which he concluded that scabies had become uncommon in the free world. McLlanby⁵ (1944), however, had suggested that scabies had cyclic epidemics that were not necessarily related to social conditions and that the increase believed to be caused by, or at least revealed by, the mass evacuation of children in 1940 was actually an epidemic which had already begun some years before. In a letter⁶ to the *British Medical Journal* (1958) he repeated these views and reminded readers that an increase in scabies was likely as there would be many children with no immunity, and that the clinical picture might well be different.

Method

Scabies was made temporarily notifiable within the College of General Practitioners from February 1957 to August 1959, through the Epidemic Observation Unit. My intention was to collect information about scabies as seen in general practice at that time. I realized that such a survey could not prove anything about the incidence or possible increase in scabies, but it might show that scabies was now presenting in a different way.

Doctors who notified cases were asked to give the following information about each patient:

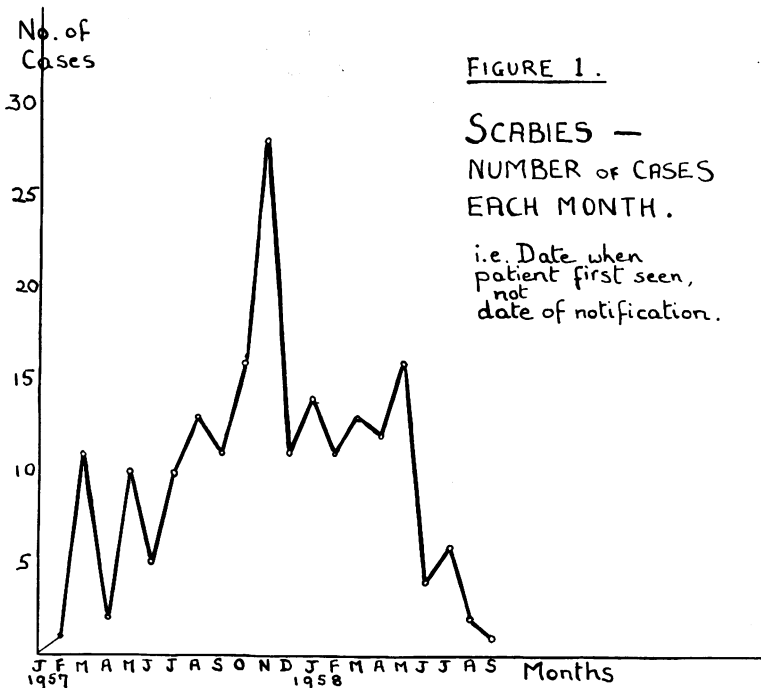
- Date first seen.
- Sex.
- Age.
- Source of infection, if known.
- Distribution on the body of the typical lesions.
- Whether acarus identified, or diagnosis confirmed by response to specific treatment.
- Whether house was clean, untidy, or dirty.
- Size of doctor's practice, or number of patients under his care.

Results

During the nineteen months of the survey, 63 doctors notified cases of scabies, and 95 others said that they had seen no cases. The average number of patients under a doctor's care (often including those of partners of whose cases of scabies a doctor would hear) was 3,900. Altogether, 215 cases were notified of which 24 were incomplete as it was not possible to obtain full particulars about them.

One doctor saw 15 cases, one 12 and one 11, but most saw three or four and many only one.

Date when seen. Figure 1 supports the belief that scabies is on the whole more common in the winter.



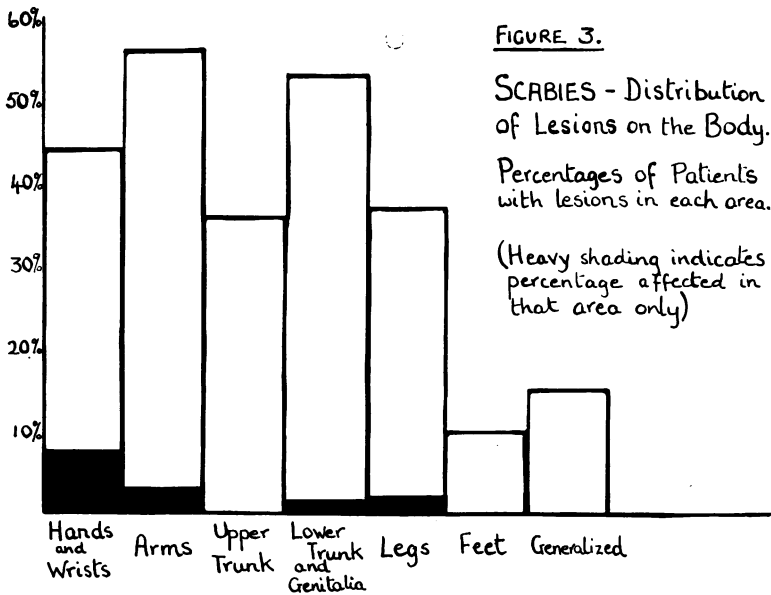
Sex and age. There were 81 males and 110 females. (Figure 2). In childhood there was little difference between the sexes, but between the ages of 11 and 30 there was a marked female predominance. Between 31 and 60 there was again little difference, and after 60, males began to predominate.



Source of infection. There was very little certainty about this. Where known, contacts were usually close relations within the family. In two well-authenticated cases, however, the infection was definitely traced to dogs, the canine acarus being identified and the condition responding in dog and child to benzyl benzoate.

Distribution of lesions on the body. (Figure 3). 88 patients had lesions on hands and wrists (15 on hands and wrists only). 112 had lesions on the upper limbs (6 on upper limbs only); 72, upper trunk; 107, lower trunk and genitalia (3, these areas only); 74, lower limbs (4, lower limbs only); 10, feet; and 15 were described as "generalized". In most cases several areas were involved, with no lesion described as on the face or head.

In only 38 cases was the acarus identified. Indeed, in many cases it was the response to benzyl benzoate, given where all else had failed, that had suggested the diagnosis.



Condition of the patient's house:—

Clean	..	..	..	..	..	..	92
Untidy	..	..	..	..	..	..	56
Dirty	..	..	..	..	..	..	40
Unknown	..	..	..	..	..	..	31

Discussion

One or two figures suggested a departure from the generally accepted pattern of belief about scabies, notably the sex incidence and the body distribution. There was no question of male predominance until after 60 years, when many of the patients were described as "tramps". The most commonly attacked groups were those of young adult females and children.

All areas of the body with the exception of the face and head could be attacked, and most cases had fairly widespread lesions, only 7.5 per cent having the disease confined to hands and wrists, and even fewer confined to any other area. A very common picture was of a young woman with an itching rash on arms, chest, and trunk. The absence of any lesions on the face and head would seem to be a valuable pointer still.

The acarus was not often identified, in many cases because it had not been looked for, the case not suggesting scabies at all in the first place. The possibility does exist that benzyl benzoate may

cure other itching lesions as well as those of scabies, and the general increase in hygiene that may follow the diagnosis has to be considered, but it seems unlikely that these would act so dramatically, especially after much more potent remedies had been tried. I think that one may conclude that the great majority of these cases *were* scabies, now attacking a different kind of patient in a different way.

The information obtained about housing suggests a similar change in pattern. The terms "clean", "untidy", "dirty" are of necessity vague but they give a rough impression of the kind of people attacked. (They were used in an earlier investigation.) It is clear that clean houses are not immune. We have no information about the proportion in general of clean, untidy, and dirty houses but nowadays there must be far fewer really dirty homes, so that although in this survey more clean houses were involved, it would still be true to say that children living in a dirty house are more likely than others to get scabies. Many other factors than dirt are involved here—low mentality, poor diet, and so on. The important thing is that perfectly clean people seem to be getting scabies now, and dirt alone cannot be blamed.

Summary

An account is given of 215 cases of scabies occurring in general practice during twenty months in 1957-8. It is suggested that the clinical picture of scabies has changed and that a different class of patient is being attacked. Although no conclusions can be drawn about the possibility of an increase in scabies the diagnosis might be considered more often in cases of intractable itching.

REFERENCES

- ¹Friedman, R., (1947). *Story of Scabies*, Vol. 1. New York.
 - ²Hellier, F. F., (1956) *Brit. med. J.*, 2, 1117.
 - ³McGregor Margaret S. M., (1956) *Ibid.*, 2, 1427.
 - ⁴Epstein, E., (1955) *Dermatologica*. 110, 126.
 - ⁵Mellanby, K., (1944) *Scabies*. Oxford University Press.
 - ⁶Mellanby, K., (1958) *Brit. med. J.*, 1, 579.
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