

Further Notes on Mercurochrome.

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IN the July, 1932, number of this journal we wrote an article on the uses of mercurochrome in leprosy. In that article three of its actions were mentioned.

1. Clearing up septic conditions.
2. Clearing up the allergic condition known as Lepra Reaction.
3. Breaking down of leproma, causing necrosis and liquefaction of nodules.

It was mentioned that it was yet too soon to state whether this last action would be of real value in clearing up leprosy lesions.

Since writing that article we have tried out mercurochrome thoroughly in a large number of cases. This further experience confirms our opinion of the great value of this drug in the first two actions mentioned, *viz.*, clearing up septic conditions and arresting lepra reaction. Lepra reaction is not, however, relieved in every case, but only in a certain proportion, and there is good reason to believe that it is only in cases in which lepra reaction is dependent on a septic condition that mercurochrome is able to control it.

If this is so, then we are able to state that in many cases of leprosy, septic infections predispose to or even cause lepra reaction, and their removal by treatment with mercurochrome often results in the almost immediate disappearance of the signs of reaction.

The third action of mercurochrome, *viz.*, breaking down of leproma, causing necrosis, liquefaction and abscess formation in nodules, is one which must be kept in mind whenever this drug is used. We had hoped that mercurochrome would be useful in the special treatment of leprosy and would gradually eliminate the leprosy infection from the body. In practice, however, this has not turned out to be the case. While a considerable amount of leproma is eliminated from the body by the necrosis and liquefaction of nodules, the general health of the patient is apt to deteriorate at the same time, causing increase of leproma in other parts of the skin. Thus the net result does not appear to be favourable, in fact, if the resistance be low the condition of the patient may be rendered considerably worse.

We have used mercurochrome injections into diffuse lepromatous lesions in the hope that side by side with the general effect there would also be a local effect in eliminating the disease in the areas injected. Judging, however, by bacteriological results before treatment, with similar examination after six monthly infiltrations had been made, the acid-fast organisms do not appear to have been diminished to any appreciable extent.

CONCLUSIONS.

1. Mercurochrome should be administered intravenously in a one per cent. solution, the initial dose for an average-sized adult of 10 stones being 3 c.c. rising to a maximum of 10 c.c. Injections should generally be given once a week ; but if no febrile or other marked reaction is caused by the first dose, a second injection of 5 c.c. may be given three days later.

2. Benefit may be derived after a single small dose, but quite commonly improvement is delayed till the maximum dose is reached.

3. In patients suffering from septic conditions it is usual for a *flare-up* to occur in the site of septic infection. This shows itself by focal sign such as pain and swelling of the gums, pains in the bones and joints and other parts of the body, diarrhoea and other signs of gastro-intestinal irritation, swelling and irritation of the skin. These signs generally pass off in a few days and are less on the next injection, showing that there has been not only a lighting up, but also a clearing up of the septic condition.

4. In many patients there is a marked improvement in dermal infections, pyorrhœa, bowel conditions, etc., accompanied by general improvement in the state of the health. In others there is improvement in health without any noticeable focal changes.

5. In a large proportion of patients suffering from lepra reaction (shown by a general febrile condition, swelling and vascular engorgement of lesions, repeated appearance and disappearance of crops of dermal nodules), the improvement is most spectacular and often immediate, both fever and focal signs disappearing within a few days.

6. If during a course of mercurochrome treatment there is any sign of recrudescence of acute signs, such as swelling of lesions or rise of temperature (apart from the temporary rise lasting a few hours immediately after injection) then mercurochrome should be discontinued. Another indication for discontinuation is a marked increase in the rate of red cell sedimentation.

7. As a rule the best results are obtained with a course of five or six injections.

8. Mercurochrome is of no value in the special treatment of leprosy ; *i.e.*, it is unsuitable for the purpose of eliminating leprotic or other lesions, except in so far as it improves the health and removes concomitant infections which might delay recovery. When given in excessive doses or when continued over too long a period it causes the liquefaction of leprosy nodules ; but, as far as our experience goes, this is not, in the long run, favourable to the recovery of the patient.