

Medical Matters.

COLD CHAMBER TREATMENT.

In an interesting article in the *British Medical Journal*, Dr. John Gordon Thomson, of the Liverpool School of Tropical Medicine, describes "Some Experiments on Cold Chamber Treatment." In a preliminary note he writes as follows:—

No noticeable change can be observed in a patient's body as a consequence of alteration of external temperature; but nevertheless changes may be produced in his blood and tissues which may be inimical to the parasites living in him.

It is common to send patients suffering from malaria to temperate climates, for example, the hills of India, and it is easier to treat such patients in England than in the tropics. Again, from a careful study of the statistics in India it has been noted that a sudden rise in the malaria-rate occurs at the end of the cold season before any new brood of *Anophelines* has been hatched out. This may be due to relapses caused by the greater heat.

In discussing relapses in malaria, Dr. R. Ross (1910) puts forward as a hypothesis that external heat probably tends to encourage these. Although the temperature of the body remains much the same, the parasites may be stimulated by the heat in some way, owing to the fact that warm climates are specially suitable to them and to their dissemination by mosquitoes. The same observer, while conducting experiments in India with birds, noted when he took these to a cold climate, such as the Himalayas, that the parasites in their blood greatly diminished in numbers. Many observers, especially in Italy, have noted that season affects the plasmodia, especially the sexual forms, quite apart from the proliferation of the carrying agents.

Not many years ago phthisical patients were shut up in hot rooms, and now such patients go to the hills of Switzerland, where they are subjected to a cold dry atmosphere. In fact, there is good reason to believe that the cold acts in these cases as a tonic to the whole animal organism, and without doubt acts almost as beneficially as the purity of the air inhaled.

It has been shown by Raubitschek (1910) that white rats fed on buckwheat and exposed to the sunlight develop a disease which has been called fagopyrismus, a condition which in many respects simulates pellagra, whereas those kept in the dark remain quite healthy. Before this experiment, a suggestion that sunlight was capable of aiding disease would have

been regarded as most improbable, but here we have absolute and direct proof of the influence of such natural agencies.

It is usually admitted that people who live in cold climates have more vitality and energy than those who live in the tropics. More work is done and greater energy displayed in cold climates. Too much heat and too much cold will both lower vitality. In suggesting cold treatment, however, we do not mean exposure, and we did not in any way lower the vitality of the animals observed by us. It has been well proved, after about eighteen months' experimental work with rats and guinea-pigs, that the animals in the cold chamber are livelier and take their food better than those in the varying atmosphere of the animal house, the temperature of which in the summer months was often very high. A cold moist atmosphere or exposure to a sudden change of temperature may be exceedingly dangerous to the vitality of an organism, but this is quite a different thing to the cold dry bracing atmosphere of Switzerland and Canada during the winter. All visitors to the cold chamber here admitted the efficacy of a short sojourn in it, and this was most noticeable during the heat of summer. One feels more vigorous in this chamber, and this probably better than anything else may suggest the possible value of treatment in it.

Very little seems to be known of the physiological action of cold air on the living organism. It is known that cold causes constriction of the peripheral arterioles of the skin, and that a cold bath stimulates leucocytosis.

THE VALUE OF OBSERVATION WARDS.

In his annual report of the certification of lunatics and the observation ward for the past year, Dr. Martin, certifying physician to the Edinburgh Parish Council, speaks highly of the value of the observation ward, the high percentage of "recovered" and "improved" cases, and the low percentage of cases ultimately needing certification, and also of deaths. The hoped-for success of the step initiated a year ago was an accomplished fact. Dr. Martin goes on to say that the insufficiency of the accommodation materially limits the amount of possible good and debars any beneficial attempt at classification. He points out the benefit to the community which would ensue if a mental observation hospital were provided by the Edinburgh Parish Council: the benefits which have accrued from the observation ward at the Royal Infirmary would be enhanced both in degree and measure. Surely the suggestion is both rational and humané.

[previous page](#)

[next page](#)