A STOCK VACCINE IN PNEUMONIA.

BY

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DURING two and a half months I had in my wards eighty-one cases of pneumonia. All were Indians, and almost all started as influenza, although such complications as malaria (M.T., B.T.), dysentery, and relapsing fever were present in addition to the pneumonia. All the cases were of the bronchopneumonic type; the sputum in practically all cases was excessive, purulent, and very often blood-stained, but not rusty. In over 90 per cent. of cases a Gram-positive strepto-diplococcus was the predominant organism; it was found also *post mortem* in the lungs. It was isolated by Captain J. D. Benjafield, R.A.M.C., and a vaccine was prepared from several strains, this vaccine being used as the stock vaccine in my treatment.

When I was using the vaccine for the first time I divided my cases, so that every third of those who had the strepto-diplococcus in the sputum was treated with the vaccine. Later, as I found the vaccine to be of value, every second case was treated with vaccine, and latterly every case of pneumonia which had had the streptococcus in the sputum received vaccine treatment; the sputum of every case of pneumonia was examined for the organism.

As regards other treatment, all cases have been treated similarly. All have been treated with a stock mixture consisting of potassium iodide, tincture of belladonna, and aromatic spirits of ammonia; as the cases occurred in a region where malaria is very common, even though that disease was not found to be present on the examination of two blood films at least, quinine was given daily. As the mouth was usually very dirty, and pyorrhoea alveolaris by no means uncommon, a thymol mouth-wash was given daily to every case. The usual stimulants and oxygen were given according to the circumstances of the case.

The dosage of the vaccine used as a standard was as follows, slight deviations being necessary according to the circumstances of the case; for instance, if a marked reaction followed one dose of vaccine the same dose was given when next the vaccine was due, and not the increased dose. The first dose consisted of five million of organisms injected subcutaneously; the second, given two days later, of ten million; the third, given three days after the second, consisted of fifteen million, and the fourth, given four days after the third, of twenty million. In every case when the temperature came down to normal the vaccine was stopped, but was given if any rise of temperature occurred again.

The statistics for the 81 cases seem to show that the stock vaccine is of great value:

1. Treated with vaccine (35 cases).				
Cures	...	...	...	30
Deaths	...	...	...	5
Mortality, 14.3 per cent.				
2. Not treated with vaccine (46 cases).				
Cures	...	...	...	30
Deaths	...	...	...	16
Mortality, 34.8 per cent.				

Among the five deaths in those treated with the vaccine three were complicated, one with malaria (B.T.), the second by acute bacillary dysentery, and the third was found at necropsy to have acute tuberculosis of the lung and pleura combined with tuberculous laryngitis as well as pneumonia. Only two of the deaths were uncomplicated, thus lowering the mortality in the uncomplicated cases to 5.7 per cent. In the cases not treated with vaccine six of the deaths occurred in cases complicated by other diseases, three being complicated by malaria (M.T.), two by malaria (B.T.), and one by a liver abscess, leaving a total of ten deaths from uncomplicated pneumonia, the mortality being decreased to 21.7 per cent. in such cases.

Four cases were treated with autogenous vaccines prepared by Captain Benjafield from the sputum of each case. All these cases seemed to be chronic, but all recovered, and a marked improvement was shown after the use of the autogenous vaccine.

THE HEALTH RESORTS AND THE STATE.*

BY

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THE establishment of a Ministry of Health marks a new era in the history of the medical profession and demands the closest attention and criticism, with a view to co-operation of every practitioner, without which it must fail to achieve any substantial success. In addition to united effort to further the broader aims of medicine each special branch must seek to develop its opportunities for the welfare of the nation. Sir Bertrand Dawson, in his recent addresses on the future of the medical profession, has pointed out how great a field of usefulness exists for the health resorts in this direction, especially in the early and preventive treatment of many diseases which seem peculiar to the strenuous life of to-day. If this field is to be cultivated to its fullest extent it is essential that all practitioners in such resorts should combine to guide the development of such places, whether they be spas, seaside resorts, or simple climatic stations, and to bring their claims as the convalescent homes of the nation prominently before the notice of the public and the state. A Ministry of Health, whatever its initial programme, must develop in the direction of providing care and treatment for the sick—primarily the poor, but ultimately for the whole community so far as they may elect to take advantage of it. National sanatoriums for tuberculosis already exist; health resort treatment for the soldiers has been freely provided during the war, and its logical sequel in the provision of the same for pensioners has followed; nationalization of hospitals is in the air, and will, I have no doubt, soon become a fact, and state recognition and control of health resorts will follow sooner or later, and it ought to be in the hands of the medical profession to determine what form it shall take.

Of the total working time lost by the population through illness a very large proportion is due to chronic diseases of the rheumatic type which are capable of being effectively treated in our spas. If sent for treatment early they can be restored to usefulness, but if allowed to drift, as they often are, they become hopeless cripples, such as may be seen in numbers in the Poor Law hospitals. In no class of case is there a greater prospect of saving years of usefulness to the state by early treatment, and such cases ought to be able to obtain the best treatment directly they are diagnosed. But how can this be done so long as the only hospitals specializing in such work are dependent on charity, and bound to limit the stay of patients by the subscriber's letter of recommendation or some similar means of accommodating the supply to the demand? The hospital at which I have the honour to be a member of the staff possesses over 300 beds; I have known a waiting list of over 500 names, many of the unfortunate people losing time which must make all the difference to their chances of cure. All such institutions should be controlled by the state in such a manner that no other factor shall influence the stay of the patient than that of the maximum benefit having been secured. In urging this I am not advocating the claim of any particular mineral water or, indeed, of any special line of treatment, but simply that such cases should be brought together under conditions of the most favourable kind as regards climate and surroundings—in fact, in health resorts, where will necessarily be congregated practitioners of the greatest experience in the management of such diseases. The equipment available must be of every kind—balneological, electrical, dietetic, etc.—and full provision must be made for bacteriological and chemical research, and x-ray work.

Nor is it only for the rheumatic diseases that such provision must be made, nor for the poorer classes only. A large section of the middle classes, who work long hours in shop or office, often under unfavourable conditions, cannot afford the cost of a visit to the spa or the sea of sufficient duration to restore their mental and physical balance, or the loss of income entailed by absence from work, while their income and so-called social position exclude them from hospital treatment on charitable lines. Largely for such cases Sir Bertrand Dawson has suggested

* Shortened version of a paper read before the Section of Balneology and Climatology of the Royal Society of Medicine on March 6th.