A GOVERNOR'S MEDICAL REPORT-1851

By Y. K. Lee

The old Straits Settlements comprising Singapore, Penang and Malacca were British possessions for more than a century. Penang and Malacca are now constituent states in Malaysia, and Singapore is an independent sovereign island Republic.

Penang was founded in 1786, Singapore in 1819, and Malacca was exchanged for Bencoolen in 1824. From the time of their establishment until 31st March, 1867, these Settlements were administratively a part of India. The Governor of the Straits Settlements was subordinate to the Governor of Bengal, and later, from 1851 onwards, to the Governor-General of India. Penang was the capital of the Settlements until 1832, when it was transferred to Singapore.

The headquarters of the Medical Department was also in Penang. In 1835, the Senior Surgeon in the Straits moved his headquarters and official residence to Singapore. The Senior Surgeon was the most senior Medical Officer in the Settlements, and was the administrative and professional head of the Medical Service.

In these days, when a doctor spends a lot of his time filling forms and writing reports, it would be interesting to study the medical report of a Colonial Governor, issued in 1851 by his Senior Surgeon, the most experienced medical officer in the Straits. It would at the same time throw some light on the mode and standard of medical care and treatment in the mid-nineteenth century in Singapore. This was the era when the influence of climate on health and disease was a subject of paramount importance to medical men, especially the influence of tropical climates on European constitutions. Medical topography in relation to the prevention and cure of those formidable diseases to which Europeans were subject in hot climates was the subject of many books and learned dissertations.

Colonel William John Butterworth, C.B., of the Madras Army was appointed Governor of the Straits Settlements on 14th June, 1843. He resigned in March, 1855, after being in office for nearly 12 years. Colonel Butterworth joined the Madras Army in 1818, and served in India. In his medical history, it is recorded that he returned to England

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THE MEDICAL REPORT AND ACCOM-PANYING SICK CERTIFICATES

"Colonel Butterworth, C.B., a man of more than ordinarily robust and strong frame of body, weighing about 14 stones, had for many years enjoyed excellent health; his habits are active and temperate, always accustomed to regular meals. During the year 1850, he had two rather sharp attacks of illness, the first being an inflammation of the Pleura, for which he was treated by active and antiphlogestic measures and from which he recovered speedily and pertectly; the other attack was one of fever of the remittent type with cerebral symptoms of some consequence. This occurred about the latter end of the year and from this attack he also recovered without any unpleasant sequela. But before his last attack, he several times complained to me of a numbness of the little and ring fingers of both hands, to which I was disinclined to attach any importance, but since the commencement of the present year, this numbness has increased, with a pricking sensation (as he expressed it) like a limb recovering from sleep; accompanying these symptoms, there have been a sense of weight and pain in the head as if he had received a severe blow in the organ, seasonal dimness of vision and noise in the ears; his eyes are frequently much suffused and the conjunctivae engorged, and lately he has been troubled with an overpowering desire to sleep. He has once or twice felt a numbness in the lower extremities. The circulation is rather below than above the normal standard, the sweat is perfectly regular in action, appetite and digestion good and liver has always acted well.

A brain congested and oppressed performs its functions imperfectly.

I cannot therefore avoid the conclusion that these symptoms, now of some standing, are of a grave character and of more than ordinary importance in a climate like the Straits where the nervous instability is at its maximum, and where diseases of the brain and its membranes are of such common occurrence, of which Colonel Butterworth has had most emphatic evidence in JUNE, 1974

his own Establishment, the warning can scarcely be more expressive.

The means employed with a view to averting this threatened danger have been a reduction of food to about one half the usual quantity. A cup of tea or coffee in the morning after his ride; at breakfast, a slice or two of bread and butter or toast with a cup of tea and a little fruit; at dinner, soup and a slice of meat with vegetables and a couple of glasses of Claret with a cup of coffee in the evening, is all the food and stimulants taken in the 24 hours, and in my opinion, to reduce a man who has lived generously all his life to a less quantity would be inadvisable. The head is kept cool by sponging with cold water several times a day, exercise in the open air to the fullest extent of not over-exerting the circulation, cathartics twice a week, 12 leeches once a week behind the ears. Dry cupping was tried but did not appear to benefit. The application of leeches is decidedly beneficial and the only other prophylactic measure I would feel disposed to adopt is to put a seton in the back of the neck, but the patient thinks that the irritation and annovance likely to be occasioned by this remedy would more than counterbalance its beneficial effects and no doubt it would be irksome and inconvenient to a man obliged to give close attention to official duties.

But in my opinion the safest and best plan to follow would be for Colonel Butterworth to remove to an extra tropical climate, and have perfect quietude of mind and exemption from official duties for a considerable period

> Thomas Oxley, Senior Surgeon, Straits Settlements.

In addition to the foregoing remarks, I have only to observe that Colonel Butterworth had a seton put in his neck before leaving this Station for Penang; that he has tried the change of climate afforded by the Hill of Penang and that his symptoms have not by the report just received from Dr. Rose improved. There can therefore be no longer a doubt as to the imperative necessity for seeking a climate more adapted to his complaint. I have therefore granted a medical certificate for that purpose, recommending a change and resi-

dence in some of the Australian colonies for 2 years. Thomas Oxley, Saviar, Surgeon

Singapore, 23.6.1851

Singapore, 17.3.1851

Senior Surgeon, Straits Settlements.

I, Thomas Oxley, Senior Surgeon, do hereby certify that Colonel Butterworth, C.B., Governor of the Straits Settlements, is in a bad state of health, and I solemnly and sincerely declare that according to the best of my judgement, a change of air is essentially necessary to his recovery, and do therefore recommend that he may be permitted to proceed to any of the Colonies of New South Wales, and have the benefit of that climate for the space of two years.

Singapore, 23.6.1851

Thomas Oxley, Senior Surgeon, Straits Settlements.

Governor Butterworth's "two rather sharp attacks of illness" were most probably viral infections. One was an acute respiratory tract disease with pleural involvement of short duration. The "remittent fever with cerebral symptoms of some consequence" was an encephalitis, most likely to be due to arbovirus (Japanese B). The mosquito vector and the virus are still present in Singapore. Of course, the illness could have been due to other viruses, c.g. the enteroviruses. The speedy recovery excludes cerebral malaria, tuberculous and pyogenic meningitis.

The numbness and paraesthesia in his fingers are very suggestive of cervical spondylosis. Butterworth was 51 years old then. Hypertension with transient ischaemic attacks of the vertebralbasilar system could account for the sensation of weight in the head, headache, periodic dimness of vision and tinnitus, numbress in the lower limbs and overpowering desire to sleep. The late sequelae of the encephalitis is another possible diagnosis. Psychogenic overlay superimposed on his illness must not be lost sight of. Neurasthenic tendency is often exaggerated or brought to light by organic disease. "Tropical neurasthenia" was very common, and in the 1850s it was ascribed to "nervous instability" caused by the climate. One here has to be chary of the diagnosis of Neurosis as there may be an organic basis which could not be diagnosed in 1851, e.g. the sphygmomanometer with the pneumatic cuff was not invented until 1896 by Riva-Rocci; or the use of X-rays.

Governor Butterworth was diagnosed as suffering from a "brain congested and oppressed", for which relief at the earliest possible moment was imperative.

We will now proceed to discuss the treatments prescribed by Senior Surgeon Oxley for the Governor, presumably the best treatment available then.

For the inflammation of the pleura, active and antiphlogestic measures were taken which resulted in a speedy recovery. The "active" measures then available to combat inflammation were the application of cold (water, compress, ice-bag), the application of heat (compress, hot water bag

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and poultices), and the use of counter-irritants the raising of a blister to relieve the pain of pleurisy was commonly practised. Antiphlogistics were drugs which lessened inflammation.

There is no mention of how the fever with cerebral symptoms was managed. The standard treatment of a remittent fever was a very complicated regime which included blood letting, cold or tepid sponging, cooling drinks, the administration of saline diaphoretics, diuretics, calomel with antimony, opium, arsenic, purgatives and quinine, the application of leeches and regulation of diet.

The treatment of the "congested brain" was vigorous and drastic. The theory then held was that Europeans in the Tropics had a "congestive diathesis" with a tendency to local or general plethora. The treatment was directed to altering the distribution of blood, generally and locally.

There was a general reduction of food and alcoholic stimulants, and the head was kept cool by sponging. The great physiological rule then for preserving health in the tropics was "keep the body cool".

Two main methods were used to alter the local distribution of blood, namely the use of counterirritants and "depletion". "Depletion" could be achieved by the local application of cold, dry cupping, scarifying and cupping, i.e. to extract blood. Leeches could be used in place of scarifying and cupping. Each leech could suck one teaspoonful of blood, and if the wound were allowed to bleed and formentations applied, the total loss would be two or three times more. Drastic purgatives were often administered in cases where the head is congested. The irritation set up in the intestines caused a "revulsion" and drew blood away from the brain to the abdomen. A seton was a thin strand of linen or silk drawn through a fold of skin and subcutaneous tissue and left projecting at both ends. This caused a fistulous tract, and was an effective means of counter-irritation.

In addition to these therapeutic measures, Governor Butterworth also tried the change of climate at Penang Hill. (Penang is about 500 miles north of Singapore, and its Hill is 2270 feet above sea level).

In November, 1851, he sailed for Adelaide in Australia for the benefit of his health. He returned to Singapore on 9th November, 1853, having been away for two years.

Governor Butterworth resigned in March, 1855, and returned to England. He died at Millhead House, Guildford, Surrey, on 4th November, 1856.

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