



A Glimpse into the Past – Medicine in Singapore (Part 1)

By A/Prof Cuthbert Teo, Editorial Board Member

This is the first instalment of a series on the history of Medicine in Singapore.

LET ME take you on a stroll through the history of medical services and education in Singapore in this series. It is based on various sources, including the Alumni Association's book *At the Dawn of the Millennium: 75 Years of Our Alumni*; historical articles written by and conversations with the late Prof Lee Yong Kiat and also Prof Cheah Jin Seng; and files from the Ministry of Health (with access given by kind permission of former Permanent Secretary [Health], Mr Moses Lee).

Drs Prendergast and Montgomerie

Sir Stamford Raffles first landed in Singapore on 28 January 1819, with a detachment of European and Indian troops in seven ships. The health of the entire expedition was in the hands of Dr Thomas Prendergast. Prendergast was the Straits Settlements' sub-assistant surgeon at the General Hospital in Penang. In Singapore, he was made acting surgeon in charge of Singapore, and became the first head of the medical department until May 1819.¹

The Straits Settlements comprised Penang, Singapore and Malacca (acquired in 1786, 1819 and 1824 respectively). By 1826, they were formally known as the Incorporated Settlements of Prince of Wales Island (Penang), Singapore and Malacca. The Settlements were dependents of British India, administered by the British East India Company, and became a British Crown Colony in 1867. By 1942, the Settlements also included Victoria Island (part of Singapore from 1907 to 1912, then as a separate settlement; it is now known as Labuan and part of Malaysia), and two dependencies, Christmas Island (since 1889, then part of Singapore since 1900; it is now an Australian territory) and the Cocos (or Keeling) Islands (since 1886, then part of Singapore from 1903 to 1942; now also an Australian territory).

Penang initially served as the capital of the Settlements, but this was later relocated to Singapore in 1832 because of its strategic importance. The headquarters of the Settlements' medical department was located in Penang, where the senior surgeon (also called the superintending surgeon) officially resided, with assistant surgeons in Singapore and Malacca respectively. The first doctors who practised in the Settlements were all officers in the army of the East India Company, who arrived there when their regiments were posted from India. Then, the term "surgeon" designated rank among the army doctors as follows: surgeon-major, surgeon, assistant surgeon and sub-assistant surgeon. They were not necessarily surgical specialists. These army doctors were assisted by a few medical subordinates. Initially, these doctors' duties were both military and civil. Later, there was a separation of duties – the civil or residency surgeon did not do military duties, while the garrison surgeon looked after the troops and their families. In the civilian service, the term "surgeon" then became a designation of the various grades, for example, colonial surgeon, assistant colonial surgeon and house surgeon. The holder of one of these civilian titles was also not necessarily a surgical specialist.

When a second battalion arrived in Singapore in May 1819, the accompanying medical officer was the assistant surgeon, William Montgomerie.² Montgomerie came from Scotland and was a surgeon with the East India Company from 1818. He married Elizabeth Graham in 1827 at St Andrew's Church, Calcutta. Montgomerie was younger than Prendergast, but was more senior in rank and was then appointed as acting surgeon in charge of Singapore. In 1835, the headquarters of the Settlements' medical department in Penang was transferred to Singapore, and Montgomerie was the designated head until he retired to England on 17 January 1844. Montgomerie and his wife were buried in Fort William, Calcutta after they died in 1856 and 1855 respectively.

Montgomerie was involved in an interesting piece of Singapore's history. Sometime before 1824, a Portuguese warship stopped in Singapore. The ship's surgeon, Dr Jose d'Almeida Carvalho E Silva, decided to stay on. D'Almeida set up a trading company (Almeida & Sons Company) and bought

land for plantations. He opened a clinic at the south end of Commercial Square (now part of Raffles Place) and a street there today is named after him.

Montgomerie and d'Almeida became interested in the resin (known as gutta-percha) of the *getah* tree (*Palaquium gutta*). Montgomerie sent gutta-percha samples to London in 1843. It was soon realised that the resin was a good insulator, easy to apply to wires and very impervious to water – properties which made it suitable for submarine telegraph cables. This was the beginning of the Gutta Percha Company, which later became the Telegraph Construction and Maintenance Company. The company began producing such cables in 1847, with the first cable being laid between England and France in 1850. Unfortunately, the first cable failed within a few hours of being laid. It was snagged by a fisherman who cut it to determine what it was. But the cable proved that the world could communicate electrically, and by the end of the 19th century, gutta-percha was used to insulate telegraph cables.³ It also changed the game of golf in the 1850s, when Scottish golfers switched from using the featherie ball (a leather pouch filled with goose feathers) to the gutta-percha ball.⁴ The resin was also put to several uses in Medicine, surgery, and pharmacy.⁴ It was used to make splints to immobilise fractures and diseased joints, as well as formed into bougies, injection pipes, catheters, pessaries, specula, forceps, and handles. A solution of gutta-percha in bisulphide of carbon was used for incised wounds – the fluid, when applied, evaporated quickly and left a thin layer which protected the wound and kept its edges in close contact.

D'Almeida later died in Singapore in 1850.

The beginnings of the general hospital

After Raffles landed and founded a trading settlement, the Chinese began to converge upon Singapore. Other early settlers included Bugis immigrants from Riau; Indian sepoys, merchants and convicts; Arabs; Armenians; Jews; and of course, the Europeans.

In early 19th century, medical services were provided for the British officials and soldiers, European merchants and seamen, sepoys (the word originated from the Urdu *sipahi*, meaning "soldier", who was a native of India and employed as a soldier in the service of the British), and the local police. Non-Europeans had to rely on the time-tested methods of their forefathers to deal with disease and injury.

The first hospital was a military hospital, erected in the cantonment for troops situated near the Singapore River, which is where Bras Basah and Stamford roads are today. The word *cantonment* comes from the French *cantonnement*. In the 19th century, when troops were not in active service or during the winter, they were distributed in small parties among the houses of a town or village, and they were thus said to live in cantonments (also called quarters or billets). By 1821, the military hospital had separate sections for European soldiers, sepoys and locals. Rich civilians (mainly



Photo: Tan Tock Seng Hospital

A portrait of Tan Tock Seng

government officials and merchants) were treated in their homes by army surgeons and for severe cases, in the homes of the doctors.

A second hospital was built in 1822. Five years later, the resident surgeon excitedly reported one morning that the hospital had fallen down on account of the decay from the temporary materials with which it had been originally constructed. The government executive officer was instructed to construct another hospital "with every regard to economy" (a very familiar phrase still heard today!).

A third hospital was thus built in 1827, and named the Civil Hospital or Singapore Infirmary. It was manned mainly by convicts. They served as dispensing assistants, dressers, orderlies and labourers, and went about in chains. At that time, the Settlements, besides being trading posts, were also penal settlements for convicts mainly from India. (Later, these prisoners provided the labour for the building of the Istana.)

By 1830, the hospital had one assistant surgeon, one apothecary or assistant physician, and a few subordinate medical assistants. However, it was in a great state of disrepair by then, and no one would seek admission to it unless they were in dire need. The roof was full of holes, the charges very high, and the facilities inadequate. (There were

already complaints of high hospital charges in those days!)

Due to the Civil Hospital's dilapidation, a fourth hospital was built at Pearl's Hill in 1844 to replace it. It was initially called Seaman's Hospital, and then renamed General Hospital. Europeans with mental illnesses were also treated there. One section of the hospital, which treated natives, was called the Police Hospital.

When the General Hospital first opened on 1 November 1845, it had 11 patients. A dozen mosquito nets had to be procured because of the swamps at the foot of the hill. A mortuary was also built, at the request of Dr Thomas Oxley, close to the New Bridge Road end of the path leading past the hospital. The mortuary was completed on 21 October 1851, but unfortunately, the lead tabletop was stolen after a week.⁵

Dr Oxley was born in Dublin, and graduated in Medicine from Marischal College, Aberdeen in 1805. He was appointed assistant surgeon in Singapore in October 1830, and was head of the medical department from 1844 to 1857. Dr Oxley purchased 173 acres (equivalent to 70 hectares) of uncleared jungle from the East India Company and formed the Killiney Estates. Together with William Cuppage, an officer in the postal service who occupied Emerald Hill, and Charles Carnie, a businessman who built the first house in Cairnhill in 1840, they planted nutmeg trees on land stretching from Pasir Panjang to Adam Road, through Tanglin, Claymore and Bukit Timah roads. Dr Oxley was appointed to the rank of surgeon on 23 February 1847. He sold his land in 1850 (avoiding ruin by the nutmeg blight in the 1860s), and retired to England in February 1857, where he died in March 1886.

Around the time that the General Hospital was being constructed, a hospital for the poor, called the Chinese Pauper's Hospital, was established on 25 May 1844 in the Pearl's Hill area, with a generous donation of \$5,000 from Tan Tock Seng (1798 - 1850). When it began operations, it was called a hospital to take care of the "diseased of all nations".

Tan Tock Seng was born in Malacca. He came to Singapore as a young man, leaving behind his father Whay Teck and brother Oo Long in Malacca (he also had a second brother in China). Without any money to his name, he ventured to Singapore to make his living. He first started his business by buying fruits, vegetables and fowl to sell in town. With his savings, he opened a riverside shop at Boat Quay. He eventually made a large fortune, and became the leader of the Hokkien Babas. Tan Tock Seng was also one of the founders of the Thian Hock Keng Temple at Telok Ayer Street. Besides that, he was the first Asian to be made a Justice of the Peace by Governor William J Butterworth (Governor of Singapore and Malacca from 1843 to 1855), and was very often involved in settling disputes among the Hokkiens. He was a generous philanthropist, setting up charities and paying for the burials of poor Chinese. Tan Tock Seng died in 1850 at the age of 52, leaving his widow Lee Seo Neo, three sons (Tan Kim Ching,

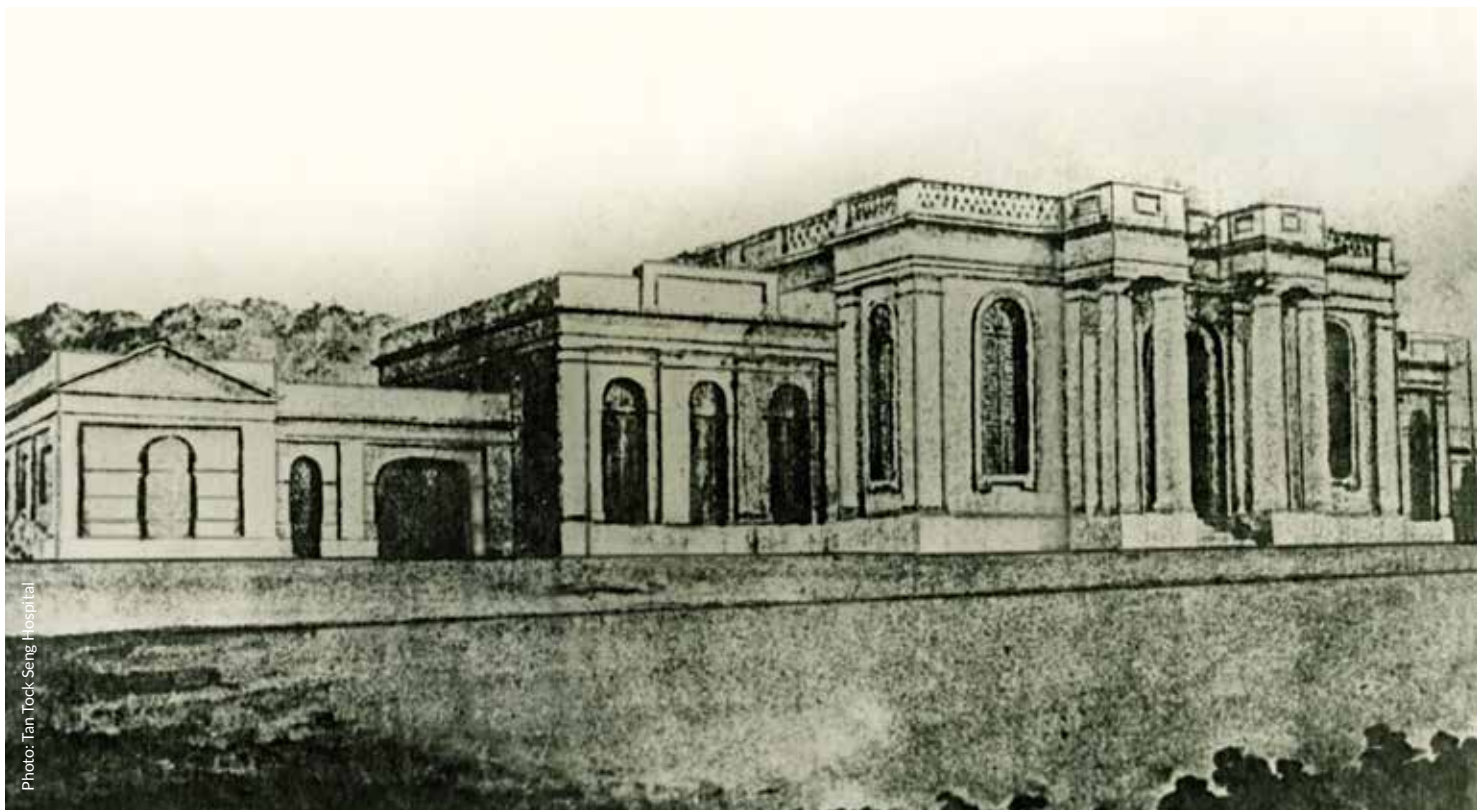


Photo: Tan Tock Seng Hospital

Tan Teck Guan and Tan Swee Lim) and three daughters. His eldest son carried on his work as well as a large business owning rice mills and steamers.

In light of the support given by Tan Tock Seng (along with his wife and son Kim Cheng) for the Chinese Pauper's Hospital, it later took on his name. The hospital moved from Pearl's Hill to the Rumah Miskin district in Balestier Plain (now the corner of Balestier and Serangoon roads) in 1861; then to Moulmein Road in 1909; and then to behind the junction of Moulmein Road and Thomson Road, bounded by Jalan Tan Tock Seng, Irrawaddy Road and Sinaran Drive, in May 1999, where it still stands today.⁶ ■

The next instalment of this series will continue with the early history of the General Hospital.

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Top An artist's illustration of Tan Tock Seng Hospital as it was from 1844 to 1856

Bottom A 1982 photograph of D'Almeida Street

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A/Prof Cuthbert Teo is trained as a forensic pathologist. The views expressed in the above article are his personal opinions, and do not represent those of his employer.