Historical Milestone

A Tribute to Tham Cheok Fai, “Founding Father” of Singapore Neurosurgery

Aaron SC Foo, 1MBBS, MRCS, James CM Khoo, 2MBBS, FRACS, FAMS, Peck Leong Ong, 3MBBS, FRACS, FAMS, Kee Hang Ho, 4MBBS, FRACS, Wan Tew Seow, 3MBBS, FRACE, FAMS, Tseng Tsai Yeo, 1MBBS, FRACS, FAMS

Introduction

In 1960, Dr Tseng Yuen Lin returned home as the first formally trained Singaporean neurosurgeon after a 2-year stint at St Vincent’s Hospital, Sydney. He unfortunately passed away of perforated appendicitis in 1962. Dr Tham Cheok Fai (Figs 1a and 1b) (commonly referred to by his trainees as “Mr Tham”), an aspiring spine surgeon at Orthopaedic ‘C’ Unit, Singapore General Hospital (SGH), was selected to succeed Dr Tseng after his passing. Mr Tham trained at Guy’s Maudsley and King’s College Hospital under world-renowned epilepsy neurosurgeon Professor Murray Alexander Falconer from 1963 to 1965. He returned to establish the first section of neurosurgery in 1965 at the Thomson Road Hospital (TRH). The fledgling neurosurgical service proved to be a resounding success by nearly doubling its operative volume by the early 1970s and receiving training accreditation by the Royal Australasian College of Surgeons (RACS). In 1972, the Singapore government decided to develop specialisation in the neurosciences and commissioned the building of a new neuroscience department at Tan Tock Seng Hospital (TTSH). In 1973, the Department of Neurology and Neurosurgery was opened, with Mr Tham as the Head of Department. From 1974 to 1976, the department received much needed support from American and Canadian neurosurgeons through the Foundation for International Education in Neurological Surgery (FIENS), and by late 1975, was pronounced a “mature” unit according to standards of the FIENS programme. By the mid-1980s, the neurosurgical unit at TTSH already sported 8 fully qualified neurosurgeons as well as the latest state-of-the-art operative and imaging equipment.

The Early Days of Neurosurgery in Singapore

In 1956, Sir Ian Douglas Miller, founding member of the Neurosurgical Society of Australasia (NSA) and Chairman of the RACS, visited (SGH) to promote the specialty of neurosurgery. Prior to his visit, general surgeons dealt with surgical pathologies of the central nervous system, often with morbid outcomes.1

“The results of brain surgery in Singapore were nearly 100% mortality at that time. Actually, for brain tumour, I saw only one who lived,” recalled Mr Tham in his interview with the National Archives of Singapore.2

Out of goodwill, Sir Douglas Miller offered to train Dr Tseng Yuen Lin (Fig. 2), then a resident at the SGH Surgical Professorial Unit, in the specialty of neurosurgery. From 1958 to 1960, Dr Tseng studied under Sir Douglas Miller at the St Vincent’s Hospital in Sydney, and returned as Singapore’s first fully qualified neurosurgeon after passing the Fellowship of the Royal Australasian College of Surgeons (FRACS) examinations. Upon returning, Dr Tseng took over the management of all patients with intracranial surgical pathologies, but seconded spinal cord pathologies to Professor Donald Rickson Gunn from the Orthopaedic Surgery Unit after a mutual agreement between the 2 of them was reached. In 1962, Dr Tseng passed away from perforated appendicitis prematurely. Mr Tham, who was then Professor Donald Gunn’s senior registrar, was chosen to succeed Dr Tseng as Singapore’s only neurosurgeon. From 1963 to 1965, Mr Tham trained at the Guy’s Maudsley and King’s College Hospitals in London under world-renowned Professor Murray Alexander Falconer, an authoritative figure on epilepsy surgery at that time.

Mr Tham described Professor Murray Falconer to be a surgeon of exacting standards who would “brook no nonsense”.2 Taking a history and performing a physical examination for a patient admitted under Professor Murray Falconer often meant investing more than an hour. The Guy’s Maudsley Hospital at that time boasted one of the best seizure surgery programmes in the world with a strong emphasis on teaching activities. The training at Guy’s Hospital gave Mr Tham a sound foundation in the neurosciences and an excellent example which the future

1Division of Neurosurgery, Department of Surgery, National University Hospital Singapore
2Neurological Surgery Pte Ltd, Singapore
3Department of Neurosurgery, National Neuroscience Institute, Singapore
4KH Ho Neurosurgery, Mount Elizabeth Medical Centre, Singapore
Address for Correspondence: Dr Aaron Foo Song Chuan, Division of Neurosurgery, Department of Surgery, National University Hospital Singapore, 5 Lower Kent Ridge Road, Singapore 119074.
Email: aaronfoosongchuan@hotmail.com
Fig. 1. Portraits of Tham Cheok Fai. In A, he is seen looking at cerebral angiograms preoperatively. Having been trained by Professor Murray Falconer, he was described by his trainees to be “Germanic” in his approach to neurosurgery. An extremely careful surgeon, he was even known to perform his patients’ removal of stitches by himself. In B, Mr Tham at a teaching session using his own brain and skull models. He was a strong advocate of continuing education and placed great emphasis on having a structured clinical teaching programme for the medical officers and nurses in his department.

Fig. 2. Photograph of SGH Surgical Professorial Unit taken in 1956. In the front row, Dr Tseng Yuen Lin is seated on the extreme left, Professor Yeoh Ghim Seng at the centre, and Mr Tham on the extreme right. Dr Tseng would train under Sir Douglas Miller at the St Vincent’s Hospital in Sydney from 1958 to 1960 and become Singapore’s first fully qualified neurosurgeon. After his premature death in 1962, Mr Tham would succeed him as the only neurosurgeon in Singapore at that time.

Fig. 3. Photograph of the Department of Surgery, Thomson Road Hospital (TRH) taken in 1966. This photograph was part of Mr Tham’s personal collection. Mr Tham is seated in the front row, fourth from the left and to his immediate right is Mr Choo Jim Eng (fondly known as “Jimmy Choo”), the Head of the Department. When the section of neurosurgery became successful in the late 1960s, Jimmy Choo gave Mr Tham an additional operating list each week to cope with the increasing demand for his services.
Singapore neurosurgical unit could be modelled after. He returned in 1965 to establish the first section of neurosurgery under the Department of Surgery of TRH (Fig. 3). Starting out humbly with only a single neurosurgeon with 1 operating list a week, the TRH neurosurgical section grew from strength to strength and by the early 1970s had managed to double its workload. Mr Tham collaborated with several specialists from other fields to introduce neuroradiology and neuro-anaesthesia to the fledgling service. For their contributions to neurosurgery, Dr Oon Chong Lin (radiologist) and Drs Chin Mun Kui, Siva Kanagaratnam, and Lillian Lee (anaesthetists) deserve special mention. In the late 1960s, the unit received accreditation by the RACS for 2 years of training under the FRACS (Neurosurgery) programme at the courtesy of Western Australian neurosurgeon Dr John Lekias, an important milestone for the training of subsequent Singaporean neurosurgeons. In 1971, Dr Gopal Baratham, a Singaporean-born doctor who completed neurosurgical training in the United Kingdom, joined the service as Singapore’s second neurosurgeon. During these early years, several international experts from across the British Commonwealth visited the unit to offer advice on its development; amongst them were Professor Norman M Dott from Edinburgh, Professor Murray A Falconer from Guy’s Hospital, Dr Francis P Morgan from Melbourne, Dr John Lekias and Dr Bryant Stokes of Western Australia, Dr Anthony James from Wellington, Dr Trevor Dinning from Adelaide, and Dr John Yelland and Dr Kenneth Jamieson of Brisbane.

In 1972, the government decided to expand neurosurgery under the medical specialisation scheme. The Department of Neurology and Neurosurgery, a centralised unit dedicated to the diseases of the nervous system, was built at TTSH and opened its doors in 1973. Mr Tham supervised most of the unit’s construction himself and modelled the department after the Guy’s Hospital neurological unit in London. Through a fortuitous arrangement by Professor Donald Gunn, who had moved to join the University of Washington in Seattle, Singapore managed to engage the expertise of North American neurosurgeons through the FIENS programme. From 1974 to 1976, 11 North American and 1 Canadian neurosurgeon rotated on a 1-to-3 month basis to teach and operate at TTSH (Table 1). In late 1975, Professor

---

Table 1. Visiting Neurosurgeons under FIENS (1974 – 1976)

<table>
<thead>
<tr>
<th>Surgeon</th>
<th>Time of Visit</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wallace Nelson, MD</td>
<td>January – February 1974</td>
<td>Seattle, Washington</td>
</tr>
<tr>
<td>W Craig Grant, MD</td>
<td>March – May 1974</td>
<td>Memphis, Tennessee</td>
</tr>
<tr>
<td>John R Clark, MD</td>
<td>June 1974</td>
<td>Chico, California</td>
</tr>
<tr>
<td>Stanley A Radvan-Ziemnowicz, MD</td>
<td>July 1974</td>
<td>Washington, DC</td>
</tr>
<tr>
<td>Robert J Goodall, MD</td>
<td>August 1974</td>
<td>Houston, Texas</td>
</tr>
<tr>
<td>Joseph E Gelety, MD</td>
<td>September 1974</td>
<td>Fort Lauderdale, Florida</td>
</tr>
<tr>
<td>John C Gibson, MD</td>
<td>October – November 1974</td>
<td>Seattle, Washington</td>
</tr>
<tr>
<td>H Harvey Gass, MD</td>
<td>December 1974</td>
<td>Detroit, Michigan</td>
</tr>
<tr>
<td>Edward L Katz, MD</td>
<td>January – March 1975</td>
<td>Portland, Maine</td>
</tr>
<tr>
<td>Franz E Glasauer, MD</td>
<td>April – June 1975</td>
<td>Buffalo, New York</td>
</tr>
<tr>
<td>William D Stevenson, MD</td>
<td>September – December 1975</td>
<td>Halifax, Nova Scotia, Canada</td>
</tr>
<tr>
<td>Stanley A Radvan-Ziemnowicz, MD</td>
<td>January – February 1976</td>
<td>Washington, DC</td>
</tr>
<tr>
<td>Harold C. Voris, MD</td>
<td>Late 1976</td>
<td>Chicago, Illinois</td>
</tr>
</tbody>
</table>
William D Stevenson (Fig. 5), a senior neurosurgeon from the FIENS programme, pronounced the TTSH unit mature. In the same period, 2 new neurosurgeons trained under the FRACS (Neurosurgery) programme in Western Australia joined the department – Dr James Khoo joined in 1975 and Dr Ong Peck Leong in 1977. In 1977, TTSH procured the most advanced neuroimaging equipment of that time, the Siemens Siretome 2000 computer tomography (CT) scanner, and became the first unit in Southeast Asia to offer CT imaging for intra-cranial pathologies. Although withdrawn in 1976, the FIENS had given Singapore a direct link with North American neurosurgery. Following its withdrawal, several eminent American neurosurgeons still continued to visit the unit as guest lecturers, including great personalities like Dr Thoralf Sundt, Professor Charles G Drake, Dr James Ausman and Professor Peter Janetta. Deserving special mention is Dr Ralph B Cloward from the University of Hawaii (Fig. 6), who performed his trademark ‘Cloward’s procedure’ on Mr Lim Kim San, then the Minister of Finance. Through interaction with our American counterparts, several Singaporean doctors obtained the opportunity to undergo neurosurgical residency training in the United States.

By the mid-1980s, the TTSH unit was staffed with 8 neurosurgeons and equipped with the latest operative and imaging equipment on the market. A full range of neurosurgical procedures were being performed on a regular basis. Mr Tham stepped down as Head of Department in 1985 and retired from clinical practice in 1991. For his contributions to Singapore neurosurgery, he was awarded the Public Administration Medal (Gold) and inaugurated into the RACS and the American Association of Neurological Surgeons (AANS). He passed away in 2013 at the age of 88, leaving behind a legacy of neurosurgery in Singapore. For his work, he would be fondly remembered by the neurosurgical community in Singapore as Singapore’s “Father” of Neurosurgery.

Acknowledgement

The authors wish to thank Mr Tham’s daughters, Dses Tham Suet Lan and Tham Mae Lan, for providing them with Mr Tham’s personal photograph collection.

REFERENCES


---

Annals Academy of Medicine