ORIGINAL ARTICLE



History Cancer Care in Kerala

Chandramohan K¹ • Babu Mathew · Boben Thomas ^{2,3} · T. K. Padmanabhan ¹

Received: 25 November 2021 / Accepted: 11 January 2022 / Published online: 20 January 2022 © Indian Association of Surgical Oncology 2022

Abstract

The history of cancer care of Kerala spread back to colonial era, where the first hospitals with cancer care facilities were started and run by the London Missionary Society. Later, many government hospitals started cancer care and establishment of the Regional Cancer Centre in 1981 elevated the status of Kerala in the cancer care map of India. The history of modern cancer care in Kerala dates back to the nineteenth century. In Travancore, where the capital of Kerala was later located, modern medicine was first made available in 1811 to the royal family followed by their officials, prisoners and the general public respectively.

Keywords Cancer care · Kerala · History

Cancer Surgery

General Hospital (GH) of Trivandrum was established in 1865; this was followed by the establishment of many treating facilities under the government sector. Parallelly, missionary surgeons from the UK and a few West European countries came to the southern part of India along with members of the East India Company from the beginning of the seventeenth century. A mission hospital was started in Neyyoor, a few kilometers from Nagarkoil in 1838 by the London Mission Society [1]. By the turn of the twentieth century, this hospital has developed into the biggest mission hospital in the world. They had an operation theatre (Fig. 1). Dr. Arthur Fells (1892–1902) and Dr. WC Bentall (1901–1907) were the first cancer surgeons (Fig. 2) [2], though Dr. T H Somervell (1922–1945) was the most famous surgeon [3, 4].

☐ Chandramohan K drchandramohan@gmail.com

Babu Mathew drbabumathew@yahoo.com

Boben Thomas drboben@gmail.com

T. K. Padmanabhan tkpadmanabhan 2009 @ gmail.com

- Departments of Surgical Oncology, Community Oncology and Radiation Oncology, Regional Cancer Centre, Thiruvananthapuram, Kerala, India 695011
- ² GG Hospital Trivandrum, Thiruvananthapuram, India
- ³ Caritas Hospital Kottayam, Ettumanoor, India



Dr. R. Kesavan Nair FRCS joined the General Hospital Trivandrum in 1937 to become the first Civil surgeon in Travancore, who was later appointed as Superintendent and Professor in of newly started Medical College Trivandrum. A galaxy of famous surgeons after him, to name a few, Drs. K. Sivarajan, P. A. Abraham, P. A. Thomas, Jayasimhan, and Mohandas, operated on cancers. Dr. Thomas Cherian is the first exclusive surgical oncologist in the state [5].

Radiotherapy

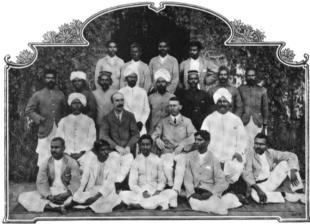
Dr. Somervell introduced brachytherapy for cancer using radium needles for the first time in India. In 1933, radium needles were purchased for the GH Trivandrum. The first teletherapy machine in Kerala was installed in the Medical College Hospital, Trivandrum in 1957. M. P. Joseph, Mahadevan Pillai, Thomas Stephen, Gangadharan, Moideen Kully, C. P. Mathew, M. Krishnan Nair, C. D. Joseph, and T. K. Padmanabhan were the first doctors. Both brachytherapy and teletherapy were available in the GH Ernakulam and Medical College Hospital Calicut before 1960. Padma Shri Dr. Krishnan Nair became instrumental in establishing the Regional Cancer Centre Trivandrum in 1981 and became the first director.

Medical Oncology

The use of chemotherapy in cancer started in Kerala in the late 1950s or early 1960s. There were only 2 drugs to start with: cyclophosphamide and methotrexate. These drugs



Fig. 1 Operation theatre at London Mission Hospital, Neyyoor



MEDICAL MISSION STAFF, TRAVANCORI

Fig. 2 Dr. Arthur Fells and Dr. Bental (in the middle) with their team

were used by physician Dr. KN Pai in Trivandrum Medical College. Later, Prof. C. P. Mathew and Dr. Krishnan Nair have started using chemotherapy more widely. Drugs like "Leukeran" and "Myleran" were used by very few doctors in Medical College Hospital in the 1960s. Dr. K. V. Krishna Das was the pioneer in treating hematologic malignancies using these drugs.

Other Branches of Oncology

Going through the book "Knife and Life in India" by Dr. T. H. Somervell, we can see that he used to give TAB vaccine for his cancer patients. Dr. C. P. Mathew used to give TAB vaccine to his patients.

Pain control and palliative care clinics were started in RCC before 1080. Morphine was the common drug used. A community cancer screening programme for Uterine Cervical Cancer has started in 1979 at the Primary Health Centre, Thrikkadavoor under the leadership of Dr. N. Sreedevi Amma. The Indo-Danish Oral cancer screening project started in 1969.

In the Medical College Trivandrum, a medical records library was functioning with the support of the Rockefeller Foundation from 1955. In 1981, a hospital-based cancer registry was started under the ICMR national cancer registry programme. Shri. P. Gangadharan was in charge. Later population-based cancer Registry for Trivandrum District was started.

In short, the development of cancer treatment in the state of Kerala was slow and steady until the establishment of the Regional Cancer Centre, by Padma Shri Prof M Krishnan Nair in 1981 which later changed the face of cancer care in Kerala.

Declarations

Conflict of Interest The authors declare no competing interests.

References

- V Raman Kutty Historical analysis of the development of health care facilities in Kerala State. Health Policy Plan 15(1):103–109
- Bentall WC (1908) Cancer in Travancore: a resume of 1,700 cases. Ind Med Gaz 43(12):452–458
- Somervell TH (1935) Conservative surgery in malignant disease. Ind Med Gaz 70(3):131–135
- Somervell TH. Knife and life in India; being the story of a surgical missionary at Neyyoor, Travancore London Hodder and Stoughton 1940
- Chandramohan KD (2014) Thomas Cherian; father of cancer surgery in Kerala. Indian J Surg Oncol 5(4):263–265

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

