

The creation of Radiumhemmet, Department of Oncology and Cancer Centrum Karolinska

By Nina Einhorn, anticipating the 200-year jubilee of Karolinska Institutet in 2010

We were on a flight to the USA when my husband Jerzy asked if I wanted to read some pages from his planned book that would be about Radiumhemmet and the healthcare in Sweden. He gave me a chapter called "Slaget om Radiumhemmet", The battle for the Department of Oncology. I read it and although I knew about the course of events very well, I couldn't help but ask "what happened then". It is strange that the history of Radiumhemmet contains so many fascinating stories. There is no doubt that within KI's 200-year history there have been many extremely strong figures that characterized research and teaching within the medical faculty. But the question is whether any other university clinic has such a colorful past with so many unusual episodes and also forward-looking personalities that have influenced its development.

As a brilliant pioneer, Gösta Forssell appears first and foremost. As he himself puts it, "I was fascinated early by the magic of the rays". He was already a medical candidate with Tor Stenbeck, who together with Tage Sjögren were the first worldwide to report on cancer patients who were cured using X-rays. In 1908 Gösta Forssell with the help of the surgeon John Berg started a separate institution for X-ray treatment at the Serafimer Hospital at Kungsholmen in Stockholm. The institute was housed in the cellar in a room of 42 m². In 1910 it was possible to move to an 8-room apartment at Scheelegatan, also at Kungsholmen, thanks to the fundraising of the Cancer Society. The name "Radiumhemmet" symbolized the home-like environment and would give patients a peace of mind. The small clinic at Scheelegatan accommodated ten patients and had an X-ray machine containing 120 mg of radium. When the business grew and the premises on Scheelegatan became too crowded, Stockholm City supported a move to Fjällgatan 23, in the southern part of Stockholm. The year was 1916. In the new premises one could now have both outpatient activities, wards with 34 beds and rooms for radiotherapy, both with X-ray equipment and with radium. In addition, housing was created for doctors, nurses and other staff.

In 1917, the clinic was divided into two parts, a general clinic with Elis Berven as a leader and a gynecological clinic under the leadership of James Heyman and Gösta Forssell. The first publication written by Gösta Forssell came out in 1909 and the results were presented internationally in Paris in 1910. Gösta Forssell remained the head of Radiumhemmet until 1927.

Rolf Sievert became the pioneer in radiophysics as Gösta Forsell persuaded him in a hotel room in the US in 1920. Sievert used his own fortune for research on ionizing radiation, and it was also he who transformed radiation therapy from art to science.

Gösta Forssell was asked by King Gustaf V, what he wished for that could promote his work. The monarch probably expected to hear something about new apparatus, more radium, better premises. Instead, he got a proposal from Gösta Forsell that all cancer patients within Sweden should get free trips to and from Radiumhemmet for treatment. These conditions are still in existence.

From 1911 to 1937, the Cancer Society in Stockholm was responsible for the running of Radiumhemmet and also for the research units of radiophysics and radiopathology.

1925 was a significant year in the history of Radiumhemmet. The Karolinska medical faculty in Stockholm began to make contributions for both clinical activities and for research. SEK 60,000 was donated for procurement of radium and an additional SEK 22,000 was donated to the Radiophysics department. In 1926, SEK 17,000 was donated to establish a department for Tumor pathology.

On October 8, 1934, King Gustaf V added the first brick to the building of Radiumhemmet. Quarrels soon arose as to the status of the research departments. The disorder consisted mainly of the fact that the Karolinska Institutet, with Professor Henschen at the forefront, wanted all staff at Radiumhemmet and associated research departments. The entire Jubilee Clinic would be employed by the Karolinska Institutet and Hospital. The Cancer Society and the Anniversary Fund discussed the problem again with the Karolinska Hospital and finally in November 1939, both funds and the heads of the research departments for Radiophysics and Radiopathology proposed that the research departments should be incorporated within the Karolinska Institutet but also remain parts of the Jubilee Clinic. These research departments would be called the department of Radiopathology and The Institute of Radiophysics but would be available to the Jubilee Clinic for teaching and research purposes.

Jerzy Einhorn took over as head of Radiumhemmet in May 1967. In November 1968, he completed the earlier commitment that he, together with Rune Walstam would start a radiotherapy department at Kenyatta National Hospital in Kenya. This department was managed by KI and SIDA until 1980, when the Kenyan authorities took over responsibility.

After returning from Kenya in March 1969, Jerzy Einhorn came to face the Karolinska Hospital's decision to reorganize Radiumhemmet. All treatment departments would be moved and distributed to the organ-specialized surgical disciplines. Similarly, the outpatient clinic would also split. The only departments that would remain at Radiumhemmet were the radiation treatment and statistics departments. The battle for Radiumhemmet as an integrated unit had begun. In 1974, new guidelines were presented for the cancer care organization in Sweden, where radiation therapy was combined with drug treatment. Radiumhemmet was again divided into organ-specialized autonomously functioning sections with specialized nurses. This created a better opportunity for communication and a referral body for other specialties. Instead of being wiped out, as planned, the cancer clinics had instead become consolidated.

In 1975, the clinics of Radiumhemmet were converted from radiotherapy to oncology with responsibility for healthcare, research and teaching in all aspects of non-surgical cancer care. At this stage, the number of in-house patient treatment beds was 124 and outpatient referral consisted of 450-500 patients daily. A special department for psychosomatic care was created under the leadership of Loma Feigenberg and a professorship in cancer epidemiology was established with the first holder professor Gunnar Eklund. An oncological center was thus organized.

In 1984, a total renovation of the Radiumhemmet was carried out, which was re-opened in 1985 by Queen Silvia. In 1988, an additional building was made, intended primarily for treatment apparatuses. In connection with this extension, new premises were created for the Department of Cancer Epidemiology and for the Cancer Society in Stockholm.

In 1982, the Swedish Parliament decided on the first withdrawal of funds from county councils and municipalities. This decision came to have a major impact on health care in Sweden.

Early in the 1980s, we had to experience the first effects of the cuts in health care resources. They resulted in Radiumhemmet being under-dimensioned when it came to radiotherapy equipments and apparatuses, treatment wards had to be closed, the on-call system deteriorated, drug costs had to be reduced, and the follow-up patient visits were reduced. It was then that Jerzy Einhorn began writing newspaper articles to raise public opinion. In 1986, Expressen published an article entitled "Sämre vård? - visst, men säg det öppet" - "Deteriorating care? - sure, but say it openly".

At the end of 1987, the number of new cancer cases in Stockholm was 7429. The number of patients requiring radiotherapy had increased and the waiting period for radiation therapy was very long, having increased to up to 6 weeks. The council at Radiumhemmet came to the conclusion that it was necessary to reduce the inflow of patients to the radiation treatment department. It was decided that some patient groups would receive radiation in the future might be treated with alternative methods, for example, hormone therapy. This decision brought a mass media storm, even the Pope reacted from the Vatican. The cuts and the approaching health crisis, as predicted by Jerzy Einhorn, prompted him to participate in parliamentary elections for the Christian Democrats' Party. The only reason he volunteered was the health care policy. When he himself had to participate in further cuts in health care in 1993, he decided not to volunteer for the next election in 1994.

Radiumhemmet tried to adapt to the new realities, but as in all other clinics, the situation became difficult in the health care area. However, research in the cancer field had gained new opportunities as a new research center. Cancer Centrum Karolinska (CCK), was organized under the leadership of professor Ulrik Ringborg. Its purpose is to promote translational research. All clinical cancer research was combined in one building and several research groups have moved from the Karolinska Institutet Campus to CCK in order to build bridges between basic research and clinical application. This time, Radiumhemmet's funds have also contributed with great financial support for the construction and equipment of CCK.

Those who contributed to the development of Radiumhemmet understood early on that the cancer clinicians were not limiting their activities to the clinic but had to influence the health care structure and society as a whole. They also understood that cancer clinics should be an integral part of the teaching units. This is also why Radiumhemmet became the oldest part of the Karolinska Institute in the Karolinska Hospital history.

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