Technical Cooperation Programme

September 2015

Strengthening cancer treatment in Honduras

The challenge…

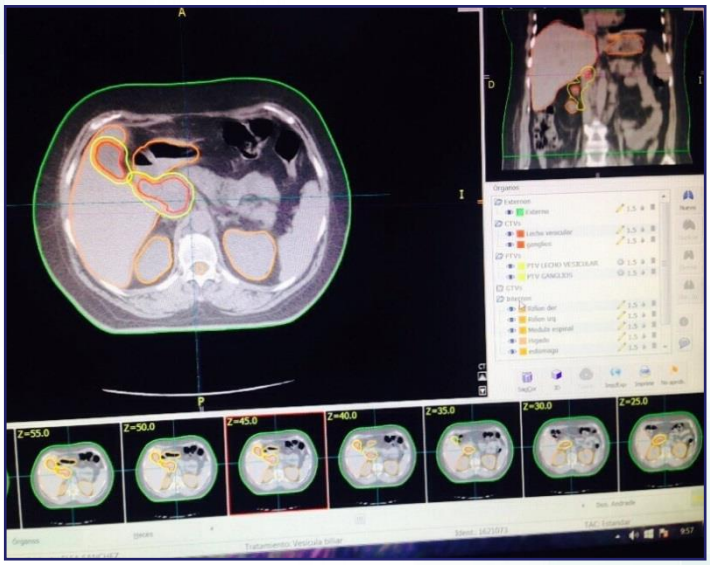
San Felipe General Hospital is the only government-level facility which treats cancer patients in Honduras. In 2011, San Felipe treated around 1000 patients, of which some 50% were gynaecological cases. Although every effort was made to attend to the majority of patients and to offer radiotherapy services, it was not possible to satisfy the demand with the existing capabilities.

In addition, the treatment plans were inadequate due to the lack of a treatment planning system (TPS), which is necessary to optimize and personalize treatment plans for each patient. Irradiation time for each treatment plan was calculated manually using the basic theory of dosimetry—a two-dimensional dose distribution was traced manually using the isodose charts provided by the Co-60 unit manufacturer. TPS software, however, provides much better precision than manual dosimetry. Establishing capacities for TPS and 3D dosimetry was a top priority in order to ensure the effectiveness of treatments and services provided at the hospital.

The project…

This national project aimed to strengthen the external radiotherapy services at the San Felipe Hospital, so that the quantity and quality of treatments performed in patients at the Oncology Department would improve.

Under the project, a TPS was procured, installed and commissioned. Medical staff, including a multidisciplinary team, were trained to perform three-dimensional dosimetry using the treatment planning system. To facilitate and complement these new capacities, the hospital's existing clinical treatment protocols were revised and updated. Finally, quality assurance procedures for clinical and physical dosimetry were established.



New technologies have allowed health professionals to diagnose more patients in less time and with greater accuracy.

The impact…

The project contributed to an overall improvement of patient conditions at the San Felipe General Hospital, primarily by enhancing the quality of the radiation therapy treatments delivered.

As a result of this project, the number of patients that receive radiotherapy has increased by 35%, according to hospital records and documentation. The average number of waiting days to start radiation treatment has been reduced from 40 to 12 days since the start of the project.

Importantly, treatment-related toxicities have been significantly reduced, and clinical dosimetry and physical dosimetry now have quality control programmes in place.

Technical cooperation project HON/6/003: Strengthening the External Radiotherapy Service at the San Felipe General Hospital