Anaesthesia at the foot of Kilimanjaro

The Radboud university medical centre (UMC) in Nijmegen, the Netherlands, has worked in collaboration with the Kilimanjaro Christian Medical Centre (KCMC) in Tanzania for a number of years, offering support and education for its staff to improve overall healthcare in the area. As part of this partnership, clinicians from the department of anaesthesia at Radboud have been developing the provision of anaesthesia at KCMC, as well as a programme to teach staff about its applications and advantages. Dr Luc Tielens, Paediatric Anaesthetist at Radboud, talks about the first Tanzania Regional Anaesthesia Symposium that he helped to establish in 2018, and describes how it is a major step towards developing the skills of anaesthetists across East Africa.

The medical departments of the Radboud UMC and KCMC organisations have worked closely together for over 30 years, however, the partnership only extended to anaesthesia quite recently in 2015. At that time, the orthopaedics department in KCMC had virtually stopped performing any surgical procedures, because the limited use of anaesthesia was leaving patients in a great deal of pain for several days at a time. The protocol for general anaesthesia at the hospital was quite out-dated, with a much lower use of opioids than is now common, and there was also no formal provision of pain control.

Developing the anaesthesia service
A pain specialist colleague and myself, an expert in regional anaesthesia, visited the hospital and began by thoroughly evaluating the situation, starting to grow a new department around the single resident anaesthetist in place. There was no sense in just providing short-term relief and then leaving again; it was important to establish a long-term plan and education programme to help build up the anaesthesia service.

One of the first priorities was to establish an effective pain protocol throughout the surgical departments in KCMC, and regional anaesthesia was an important component of this. The anaesthetic resident – followed soon by a second colleague – spent three months in Radboud learning how to perform regional anaesthesia and, since then, the technique has been widely adopted for all kinds of pain control. Three years ago, the doctors there would perform an occasional local block, now they carry out 40 to 50 a week.

Improving anaesthesia education with hands-on symposiums
In partnership with other anaesthetists from the UK and America, new education curriculums have been developed for both doctors and nurses specialising in anaesthesia. The nurses’ course in particular, is being changed from one year to three, and will hopefully be recognised with a diploma upon completion, giving it far more status. This change must still be formally accepted by the Ministry of Education in Tanzania, but is due to be rolled out in 2020; the system is slowly changing and this is going to make a real difference to educating...
those working in anaesthesia.

The successes seen at KCMC have not surprisingly created a lot of interest in the region and, in the same spirit of furthering education, in 2018 we decided to organise a local symposium about regional anaesthesia, based on similar courses arranged for the Dutch Association for Regional Anaesthesia. However, for this type of technique, hands-on training is by far the best way to learn and one of the largest challenges we faced was how to get additional ultrasound systems to KCMC for the symposium workshops. The department itself had one system, but the logistics of providing other loan instruments proved quite difficult.

Thankfully, FUJIFILM SonoSite stepped in and kindly offered to loan us four machines to pack into our luggage and take with us. It was really straightforward; we were able to travel with the systems, probes and everything required to give live screening demonstrations and workshops straight from the Netherlands to KCMC.

It was a very well received event, with 35 delegates attending over three days from all over East Africa, including Congo, Kenya and Rwanda, and including 13 of Tanzania's 17 anaesthetists. Another symposium is already planned for 2020, and there have also been discussions about starting a Tanzanian Regional Anaesthesia society – a group for local anaesthetists. FUJIFILM SonoSite has played a very important role in establishing the symposium and the society, and it's exciting to see how this will help KCMC and other hospitals in the area.

Learn more about FUJIFILM SonoSite [here](#)