

Neurovascular and skullbase fellowship in Sapporo, Japan (Sept – Dec 2023)

Sapporo, known globally as a leading center of excellence in neurovascular surgery, is highly regarded for its valuable training opportunities. I was extremely fortunate to be the first UK neurosurgical trainee to be granted this unique experience.



Professor Rokuya Tanikawa and Professor Hiroyasu Kamiyama are widely respected for their expertise in neurovascular and skullbase surgery and Teishinkai Hospital is among Japan's most renowned neurovascular centers. The hospital is distinguished for its specialised experience in reconstructive neurovascular surgery, particularly in low-flow and high-flow bypass procedures. It is also recognised for pioneering techniques in skullbase surgery and achieving impressive post-operative outcomes.

This invaluable opportunity helped broaden my exposure to the management of complex aneurysmal cases, moyamoya disease and skullbase pathologies. During this OOPT experience, I was able to observe and learn the intricate techniques for performing bypass surgery under the direct supervision of Professor Tanikawa and his two chief surgeons, Dr Ota and Dr Noda.

A typical day would commence with 7:45am ward rounds on ICU followed by morning handover. The handover was particularly insightful, covering not only admissions from the past 24 hours but also reviewing the day's scheduled elective operations. These discussions involved comprehensive case presentations with hand-drawn illustrations to demonstrate the pathology along with its surrounding anatomy. We would discuss anticipated challenges and how to manage them. Any operations performed the day before, were also presented with short videos demonstrating the main aspects of the surgery and Professor Tanikawa would often provide constructive feedback to the juniors.

Following handover, we would attend theatres and observe Professor Tanikawa operating and teaching us throughout the cases. Occasionally you would have the opportunity to scrub and assist but I found it most useful observing closely and recording notes on specific procedures that are not routinely performed in the UK. In addition to the above, we would spend the evenings practising our bypass skills on models under direct guidance from Professor Tanikawa and his chiefs. This hands-on practice allowed us to pick up subtle aspects of bypass surgery that go beyond what can be learned from textbooks or online videos.

I was fascinated by how meticulous they were when performing surgery in this institute, from skin incision to closure - ensuring the same level of dedication and attention at every stage. This can sometimes be lost working in the NHS due to time constraints, unlike Teishinkai which is primarily private based. Teishinkai is also the only hospital in Japan where the surgeons were trained to anaesthetise and intubate patients out of hours. This gave them the advantage of taking aneurysmal SAH patients directly to theatre for acute clippings within a few hours of presenting to the emergency department. The neurosurgical outcomes I had observed were remarkable and appeared to be largely due to their management and protocols in place.

There are often multiple fellows from around the world visiting Professor Tanikawa for his invaluable expertise. During my time, I had the pleasure of meeting six qualified neurosurgeons practising in Hong Kong, Thailand, Colombia, Switzerland, Portugal and Indonesia. I was fortunate to build lasting friendships with them and to continue collaborative working.



Japan is an extraordinarily beautiful country with so much to offer! The people are exceptionally polite and respectful, and I have never felt as safe as I did there. Living costs were also manageable and not overwhelmingly high as one may expect.

I had an incredible experience and would recommend it to those interested in neurovascular surgery. I am also extremely grateful to all those that provided me the opportunity to undertake this international fellowship.



