SBNS elective report

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I undertook my five-week medical elective within the neurosurgery and neuro intensive care unit (ITU) departments of the Hôpitaux Universitaires de Genève (HUG), in Switzerland. I chose to go to Switzerland to improve my French medical vocabulary, to work with francophone doctors and to understand how the Swiss graduate training was organised. I feel these aims were accomplished as by the end of the placement I could write my own clinical noting in French and participate actively to the different "colloques".



In neurosurgery, a typical day would start at 8h00 with a colloque "handover" followed by the ITU colloque to discuss the neurosurgical patients in the ITU as well as possible admissions. I visited the GIBOR (Rhythmology Operating Theatre MRI Group) to observe cutting-edge neurosurgical operations with live imaging and saw how virtual reality is used for the resection of brain masses, including glioblastoma multiforme and pituitary macroadenomas, as the Geneva centre is a pioneer in employing these techniques. I was also able to attend spine theatre and saw spinal decompressions under microscope, strengthening my understanding of neuroanatomy.

In neuro-ITU, a typical day would start at 7h30 with a "colloque" (handover) form the night team, followed by a "pré-visite" (pre-ward round), huddles and "colloques" with the neurosurgery team in order to have a multidisciplinary approach to the care of patients in the ITU, either pre-op or post-op. Patients in the ITU suffered from traumatic brain injury, subarachnoid haemorrhage, meningitis, refractory epilepsy, strokes and were closely followed by both teams. I was able to learn about the monitoring of

devices such as extra ventricular drains, lumbar drains, EEG and their indications and protocols for withdrawing. I routinely performed NIH stroke scale and Glasgow Coma Score exams to patients, as well as POCUS and transcranial doppler ultrasound. I became proficient in interpretating brain images (MRI and CT scan), as well as learning therapeutic management of patients in the neuro-ITU. Seeing this aspect of care for neurosurgical patients was particularly useful as to understand the course of patients, from critically ill to their ITU discharge, gaining a deeper understanding of the varied trajectories of recovery and the challenges associated with critical illness.

In afternoons, special colloques were timetabled such as the "difficult trajectories" one, which were bringing together all members of the team: doctors of all grades and relevant specialties, nurses, social workers, psychologists, to discuss a patient's case. All aspects of the patient's life were explored, as well as the concerns from the medical and nursing teams and an expert opinion from a psychologist specialised in organ donations and end of life discussions. These discussions often derived on collegial discussion on ethical questions in medicine, such as finding the right balance between benevolence and non-maleficence and the limits of "therapeutic obstinacy".



In parallel, I am collaborating With Prof. Hervé Quintard and colleagues from the University of Montréal, to develop a questionnaire evaluating the brain derivation strategies and practices in the French speaking countries (including Switzerland, France, Canada, Belgium) and conduct a multicentre survey analysis. There is currently a lack of consensus on brain derivation strategy (Lumbar drain (LD), Extraventricular drains (EVD)), timing, and discontinuation. We finalised our survey titled "Acute External CSF Drainage Strategies in Adult Neurocritical Care: an international Survey - Brains derivation assessment study (BDAStudy)". We tested the survey internally and implemented the feedback received. We submitted all the paperwork for approval to the ESCIM, SCCM and the HUG "Conseil d'évaluation des études ne relevant pas de la Commission d'éthique de la recherche (CEENCER)". We aim to

receive all approvals by the end of May for a dissemination in June and a recall in September. I was able to have research meetings in French with international collaborators and learn from my seniors' experience. The collaboration will extend in time thus strengthening the relationships I have with Geneva and Montréal collaborators.

Overall, it has been an extremely valuable experience that shaped me as a future doctor and will continue to have an impact in my clinical practices and interpersonal relationships. I gained extremely valuable skills and sharpened my clinical decision-making skills. Being immerged in a healthcare system markedly different from that of the UK exposed striking contrasts. These ranged from the nature of clinical presentations and access to care, to the expectations and attitudes of both patients and healthcare professionals.

I would like to thank Prof Hervé Quintard for welcoming me in his department, the ITU and neurosurgical team from the HUG, Dr Matthias Robin his support in setting up this elective, and the SBNS for their financial support.

