



Alexander Matthews

University of Bristol medical school

2024 BDIAP elective bursary recipient

North East forensic pathology practice  
02/09/2024 – 25/10/2024

Primarily based at the Forensic Medicine Unit,  
Royal Victoria Infirmary (RVI), Newcastle

A routine day started at 9 AM in the RVI mortuary. This involved observing, assisting, and performing (under supervision) some of the hospital/coronial post-mortems for that day. I joined not only the forensic pathologists, but the histopathologists, neuropathologists, and paediatric/perinatal pathologists too. It was a great chance to practice autopsy technique, improve anatomy knowledge, and learn some interesting pathophysiology. I felt heart and brain dissection were particularly tricky! I learned a lot about the common pathologies that cause sudden, unexpected deaths, most often found in the chest. Overall, I attended 79 post-mortems throughout the 8 weeks, including several where I performed all steps of dissection.

Most afternoons were spent working on a case report or an audit project. The case report described an unusual case of traumatic subarachnoid haemorrhage secondary to vertebral artery dissection from neck trauma with no external signs. The audit was on the utility of post-mortem computed tomography (PMCT), particularly what value contrast targeted coronary angiography (TCA) adds compared with non-contrast studies alone. Data from 268 cases (all cases over a 3-month period) were analysed. The work suggested that there was little uniformity in requests for non-contrast vs contrast scans across the department, that there may be limited correlation between coronary artery calcification (CAC) score and degree of stenosis reported on TCA, and that using a CAC threshold of >400 from non-contrast scans could lead to overdiagnosis of death due to coronary artery disease. Both will be written up in due course.

I joined the forensic pathologists for callouts each week. I travelled all over the region to observe forensic post-mortems, including to Middlesbrough, Sunderland, North Tyneside, Gateshead, and South Shields. I also attended a coronial inquest to observe medical evidence being given in court by one of the forensic pathologists.

I got to see new and interesting things every day in (forensic) pathology. I'm very grateful for this experience and it has been a fantastic way to spend 8 weeks! A big thank you to the BDIAP for this bursary, without which this elective would not have been possible. Thanks also go to my supervisor, Dr PN Cooper, as well as all the other members of staff in the department. Everyone was very welcoming and supportive throughout this placement.