Orthopaedic trauma - bringing together teams across the network

Xavier L Griffin

Professor Xavier Griffin is Professor of T&O Surgery and Centre Lead for Bone and Joint Health at Queen Mary University of London and Barts Health, and the President of the Orthopaedic Trauma Society (OTS).

Driven by a commitment to improving patient care, his research focuses on the clinical and cost effectiveness of new and existing treatments to advance bone and joint health. He has secured more than £45 million in research funding, alongside over 120 peer-reviewed publications and his work has been cited by NICE. He is passionate about developing innovative methodologies that harness the power of routinely collected data while combining this with the rigour of randomisation.

His vision is to make a step change in musculoskeletal research and care here in Northeast London and with colleagues across the world.

Outside of work he can be found mountain biking or rock climbing usually with his young sons in tow!

THE ORTHOPAEDIC TRAUMA SOCIETY

Orthopaedic trauma as a subspecialty has been transformed over the last 20 years. We care for the multiple injured patient, the commonest cause of death in under 40 year-olds, through to the frailest in society who sustain an ever-increasing number of fragility fractures. Fracture is the single commonest cause of failure after lower limb arthroplasty; lower limb fracture is the biggest single indication for inpatient care in the NHS. The great majority of us work in hospitals providing trauma services, and in the pandemic that included our orthopaedic hospitals too; caring for the injured patient is the universal thread that links us across the BOA.

But we are not working in isolation within our hospitals. Since 2016 in England, and now across the UK, hospitals providing care for patients sustaining trauma have been organised into hub and spoke Regional Trauma Networks (RTNs) linking together a number of trauma units with one or more Major Trauma Centres (MTCs). Now a decade on from the implementation of that policy in England, and as it beds in across the other nations, it is timely to review the benefits and challenges that the reorganisation has faced.

Open fracture of the lower limb and particularly the tibia is an ideal condition to measure the performance of the networks. Diagnosis can be easily made at the point of injury, we have clear clinical guidance in place from the BOA and NICE, and mature triage protocols. The article by Hasan Mohammad summarises a package of research utilising the Trauma Audit and Research Network data linked with national data from NHS England. He reports insights into the overall epidemiology of open fractures, the change over time, and perhaps more crucially the patterns of demand on services for early and definitive care to help us plan resourcing within our hospitals. Finally, he provides convincing evidence that care in the UK is of a high standard yielding improvements in many outcomes but cautioning that we have space yet to improve our care pathways and outcomes for patients.

Surgery, even when highly effective, has only ever been part of the treatment of fractures. RTNs were focussed on the movement of patients that needed specialist operative care but those people of course need expert rehabilitation too. The Rehabilitation Prescription has been a tool for communication between MTCs, trauma units and community-based therapists. Catherine Hilton, Lauren Taylor and Professor Katie Sheehan propose an altogether more co-ordinated approach to rehabilitation for complex fractures – 'a regional rehabilitation network'. While we are often focussed on how and when to 'fix bones' the orthopaedic trauma consultant is often the conductor of the multidisciplinary team. The best MDTs involve physiotherapists, occupational therapists and psychologists working across the network to avoid the cliff edge of care at the point of discharge.

Patrick Aldridge and Professor Dan Perry highlight that what has been achieved for adult trauma – regionalisation and care delivered across a network of hospitals – may not yet have permeated into the field of trauma in children. They focus on injuries that may be safely and effectively treated without an operation reducing resource use across a network and allowing rapid treatment of those patients with injuries requiring surgery. Surgeons are rightly worried about capacity and the impact of prioritisation of any one group of patients over another and the consequences for those often rolled over onto the next day's list. As well as advocating for our patients to managers, politicians and funders, we should be prepared to discontinue surgical treatments which are not effective.

Finally, Yizhe Lim and Will Eardley bring into sharp focus this issue and other areas where we are still failing our patients, and suggest a number of solutions to how we might work with GIRFT to do better. RTNs were established to provide better care for the multiply injured patient. But they have not yet been utilised to provide appropriate, timely care for the majority of our patients – those with isolated injuries, often ambulant and clearly able to move around the network if demand was matched better to capacity. The patient 'held at home' is not counted, has few advocates and can be lost in the noise of bed pressures and acute demands in any hospital. ■