

Gamechangers

MAJOR TRAUMA NETWORKS

Ms Susan Yoong and Prof Roy Spence

Trauma is the commonest cause of death in patients under 40 years of age. Up to 30% of deaths from Major Trauma may be avoidable. It is estimated that the immediate management of a Major Trauma patient costs the NHS between £0.3 and £0.4 billion per year. In February 2010 the National Audit Office produced a document on Major Trauma Care in England stating that the current services for people who sustained Major Trauma were inadequate. Without doubt, one of the game changers in the management of the severely injured patient has been the introduction of Major Trauma Networks in the United Kingdom.

UK Regional Trauma Networks were first introduced across England in 2012 with 22 designated Major Trauma centres. Major Trauma constitutes injuries which may result in permanent disability and/ or combinations of injuries with an Injury Severity Score (ISS) of greater than 15. Results from the Trauma Audit and Research Network (TARN) national audit 2014 show that 30% more patients are now surviving severe trauma, since the introduction of Major Trauma Networks. Scotland has announced plans to develop a Major Trauma Network which should become operational in 2016.

Northern Ireland has recently committed to auditing outcomes in Major Trauma which will hopefully lead to the development of improved care for people who suffer serious injuries in our population. With the number of road traffic fatalities increasing from 48 in 2012 to 79 already in 2014 in Northern Ireland, we can no longer afford to lag behind the rest of the UK in relation to the delivery of Major Trauma care.

REFERENCE

1. McCullagh AL, Haycock JC, Forward DP, Moran GC. Major Trauma Networks in England. *Brit J Anaesth* 2014; **113**: 202-206

MEDICAL EDUCATION. PREPARATION FOR PRACTICE: CHALLENGES, VISION AND NEXT STEPS

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If you are involved in medical education, from committed clinical teachers to educational scholars, the GMCs report 'State of Medical Education and Practice in the UK 2014' is an essential read.¹ The State of Medical Education and Practice in the UK report is a document that culminates GMC

data with other sources to provide a picture of the medical profession in the UK and the challenges that it faces. The authors overriding aim is to use the data collected to promote discussion and debate on how to support doctors and improve patient care. The report shows that overall new doctors feel more prepared for their first years of medical practice than ever before and the majority believe the skills they learn in medical school equip them for the world of work. However there is significant variation in the sense of preparedness between medical graduates from different universities ranging from 60% to 85%. Areas where graduates feel the most unprepared include prescribing safely, raising concerns and dealing with end-of-life care. This paper reiterates the call that undergraduate medical training needs to reflect the work place more to create resilient, professional and employable medical graduates. The disparity in preparedness of medical graduates from different institutions suggests educators need to share best practice and also research novel methods to increase preparedness within the undergraduate curriculum. Finally this report maps the challenges that medical education must overcome in the next decade and reflects a challenge to educationists to improve and innovate training whilst inspiring the next generation of doctors and benefiting the patients that they will serve.

1. General Medical Council. The state of medical education and practice in the UK report: 2014. Available online from: <http://www.gmc-uk.org/publications/25452.asp> Last accessed Jan 2015.

STEREOTACTIC RADIOTHERAPY FOR EARLY STAGE LUNG CANCER

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In the treatment of cancer technological advances over the last decade now permit very accurate delivery of high doses of radiotherapy to small targets. This is collectively known as stereotactic radiotherapy and can be delivered to the brain, which is known as stereotactic radiosurgery or to extra-cranial sites, which is known as stereotactic ablative body radiotherapy (SABR). Given the precision of treatment, surrounding normal tissues are largely spared which permits the delivery of very high doses of radiotherapy, which in turn increases the chance of control / cure of the lesion treated.

For those patients with early stage non-small cell lung cancer (NSCLC) and who are not fit for surgery owing to comorbidities, radiotherapy is offered. Conventional radiotherapy offers local control rates of 50-60%, but following treatment with SABR local control rates are 80-90%. When introduced in the Netherlands, SABR led to an improvement in overall survival for patients with stage I NSCLC with a hazard ratio of 0.70 (CI: 0.49-0.99)¹. At the

NI Cancer Centre, SABR treatments for NSCLC have been available since July 2013 and this is now the standard of care for patients with stage I NSCLC and who are medically inoperable. The role of SABR is emerging in other tumour types and SABR may be able to treat oligometastatic disease with the hope of curing disease, previously thought incurable². Further studies are in set-up to assess the efficacy of SABR in a range of range of clinical settings.

REFERENCES:

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2. Iyengar P, Kavanagh BD, Wardak Z et al. Phase II Trial of Stereotactic Body Radiation Therapy Combined With Erlotinib for Patients With Limited but Progressive Metastatic Non-Small-Cell Lung Cancer. *J Clin Oncol* 2014; 32: 3824-3830.