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Response to: Management of traumatic brain injury: practical development of a recent proposal

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We thank our rehabilitation medicine colleagues for their comments on our article, which illustrate how strongly all healthcare professionals involved in the care of patients with traumatic brain injury (TBI) feel about the urgent need to improve clinical services.[1,2] TBI patients desperately require a pathway that delivers effective, personalised acute and chronic care, and we would like to emphasise that our pathway does *not* propose replacing rehabilitation physicians and facilities. Rather, we view rehabilitation services as a crucial part of any TBI pathway, and rehabilitation is a highly suitable background form which to recruit leaders of specialist TBI teams.

We entirely agree with Wade that effective rehabilitation is a person-centred process, which depends on an expert multidisciplinary team, working collaboratively within a framework and care pathway derived from the biopsychosocial model of illness towards agreed goals, with treatment appropriate to the individual patient's needs.[3] However, any model of rehabilitation must:

- be underpinned by correct neuroscientifically-based diagnoses
- be accessible to those that need it.

A robust, structured care pathway does not currently exist for most patients with TBI. This deficit is, in our view, not solely resource-related. It is also down to lack of specific training and, thus, expertise in the neuroscientific diagnostics, clinical management and specialist rehabilitation needed by these patients. Conditions with comparable health and societal impact, such as heart attacks or stroke, all have specialist pathways that are highly effective. In contrast, vast numbers of TBI patients never get to see anyone with specialist knowledge in TBI and miss out on multidisciplinary input that is needed to treat the wide range of complex post-traumatic problems that often arise. This is especially the case for those with milder TBIs who present to smaller hospitals or general practitioners. This is why we proposed a structured pathway to deliver specialist, multidisciplinary care to TBI patients from their presentation to healthcare services through to the management of any long-term conditions. A structured pathway also helps to avoid patients being 'lost in the system', promotes service evaluation and supports much-needed research.

We firmly believe that a wide range of specialties should be part of this pathway, in order to best serve the whole spectrum of TBI patients. It surely cannot be controversial to advocate that TBI patients, who have received an injury to the brain, should have increased access to neurologists, neurosurgeons and psychiatrists, as well as rehabilitation teams. One challenge in managing TBI patients is the heterogeneity of clinical presentations and comorbidities. Consider an elderly patient admitted with TBI in the context of pre-existing cognitive problems, a contact sports player with prolonged symptoms after repeated hits to the head, a young person with severe behavioural or addiction issues after TBI, or a patient with refractory epilepsy following severe TBI.

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All these cases require careful diagnostic engagement from a range of interacting specialties, and the availability of a range of different treatment and rehabilitation strategies. The adoption of our proposed TBI pathway would facilitate early diagnoses of post-traumatic problems and specialist multidisciplinary care, and is complementary to and enhances currently existing services.

Our paper proposes a pathway that unites all healthcare professionals involved in TBI care under a structure that delivers specialist and multidisciplinary care to every single TBI patient. Many therapies and specialties are needed in TBI care and some patients will require more from one area than another. We can only improve TBI care by working together, learning from each other and combining our skills. Perhaps a first step would be a joint meeting, with the aim of designing a training fellowship that would provide the TBI teams of the future? ■

References

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