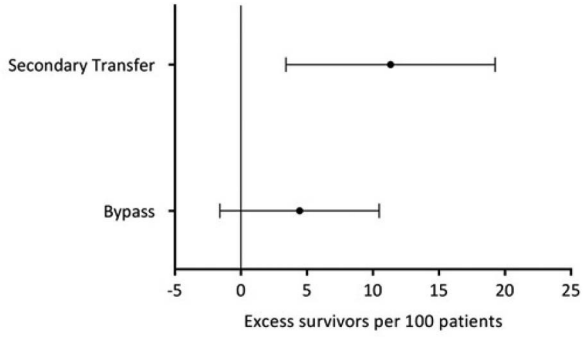

FIGURE 1. Graph showing the number excess survivors per 100 patients (W_s score) in the bypass and secondary transfer study groups, with 95% confidence intervals. The line at 0 represents the expected survival in the study population as predicted by the survival probability model on the TARN database.

Figure 1

cases of bypass (n=112) or secondary transfer (n=96) were identified. Using direct standardisation to adjust for casemix variation, and logistic regression to control prognostic variables, the differences between the expected and observed rates of survival in each group were compared.

Results Bypass of TBI patients did not significantly increase the observed minus expected survival rate (+4.4, 95% CI –1.6 to 10.5). However, selective secondary transfer of TBI patients was associated with more survivors than expected (+11.3, 95% CI 3.4 to 19.3), although the difference between groups was not statistically significant.

Conclusion Bypass of NSAHs in favour of SNCs, does not appear to significantly improve survival in TBI patients; and selective secondary transfer to a SNC, following stabilisation of ABCs at a nearer NSAH, may be a more appropriate strategy.

33 THE IMPACT OF BYPASS OF NON-SPECIALIST ACUTE HOSPITALS IN FAVOUR OF SPECIALIST NEUROSCIENCE CENTRES AS THE PRIMARY HOSPITAL DESTINATION FOR TRAUMATIC BRAIN INJURY PATIENTS

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Objectives & Background Since the introduction of the regional trauma networks in the UK, the practice of transporting traumatic brain injury (TBI) patients past the nearest non-specialist acute hospital (NSAH) in order to reach the closest specialist neuroscience centre (SNC) has been implemented. However, it has not yet been established whether this practice of 'bypass' improves survival in TBI patients, and there are concerns that it may cause delays in the stabilisation of the airway, breathing and circulation (ABC) leading to worse survival. This study sought to address this uncertainty in survival benefit.

Methods A comparative cohort study method was used to observe the differences in risk-adjusted survival in TBI patients who either bypassed the nearest NSAH to attend a SNC, or underwent selective secondary transfer from a NSAH to a SNC. The data of 400 patients with significant TBI (abbreviated injury scale score ≥3 in the head region) from two Trauma Networks in the North of England was retrospectively extracted from the Trauma Audit and Research Network (TARN) database, and