



Abstracts from the 2018 Meeting of the British Trauma Society, 7th–8th November 2018

The following abstracts, presented during the 2018 Annual Meeting of the British Trauma Society, were the winners of the Injury Journal Awards.

1st Prize Clinical Presentation

Tibial Shaft Fractures and the Montgomerie principles: what constitutes reasonable treatment?



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Introduction: Following the Montgomerie case there has been debate about interpretation of the principles in day-to-day practice. One of the recommendations is that patients are offered all reasonable treatments. Tibial shaft fractures could arguably be treated with cast, intramedullary nailing, open reduction internal fixation (ORIF), or external frame fixation. We examine whether tibial fracture patients are offered all treatment modalities, in particular external frame fixation.

Methods: Notes for adult patients suffering tibial shaft fractures (2016–17) were examined. The management options that were documented as being discussed were recorded to ascertain the proportion of patients offered external ring fixation.

Results: Twelve patients were identified. Nine patients were treated with IM nail, 2 with a circular ring fixator, and 1 in cast. No patients had documentation of a discussion of all 4 treatments. Of the patients treated with IM nail, 7 also had ORIF discussed, none were offered external ring fixator. The patient treated in cast also had IM nail explained, but conservative treatment was considered the best option.

Discussion: Montgomerie case recommends that patients should be offered all reasonable treatments and be facilitated to make an informed decision. Arguably, all 4 treatment modalities could be considered reasonable treatment. Are we, therefore, opening the door to legal action by not routinely discussing all 4 treatments for tibial fractures?

External ring fixators are generally only provided at specialist centres with limited resources regionally, potentially making it unfeasible to offer this treatment to all these patients. Without an expansion of frame services we are unlikely to be able to match the potential demand, making external ring fixator an unreasonable option to offer all these patients.

Conclusions: Of 12 patients only 2 were offered external ring fixator, and none had all options discussed. This potentially opens DGH trauma surgeons to legal risk if patients are not happy with the treatment delivered. In order to meet Montgomerie principles, however, facilities for external ring fixator will need significant expansion to make this a realistically feasible option to offer all patients. Further clarification is required on what is required to be routinely offered to these patients.

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2nd Prize Clinical Presentation

Evaluation of Costings in the Orthoplastic Management of Open Lower Limb Fractures



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Objectives: To perform a cost-analysis of the management of open lower limb patients within a regional OrthoPlastic surgery unit.

Methods: 37 and 35 patients suffering from Type-IIIB Gustillo-Anderson fractures that were treated at the Manchester University Foundation Trust (Wythenshawe) Orthoplastic Surgery Unit were identified in 2016 and 2017 respectively. Each patient was carefully assessed based on medical notes, imaging, lab results, and other investigations to ensure that medical documentation was complete. Costing was determined based on 2 different levels:

1. True remuneration: Real income received for service provision as determined per HRG remuneration.
2. Patient level costing: cost of treating patients based on Patient-Level Information Costing Systems (PLICS) data.

PLICS data was derived from the direct, indirect and overhead costs related to a patient admission spell including theatre, ward, equipment and staffing costs. Coding accuracy was assessed by clinician involvement with a senior coder in an audit of 2016 patients and continued for 2017 patients. The impact of HRG4+ introduction in April 2017 was determined by simulation of 2016 patients through the HRG4+ 2017/18 Local Payment Grouper.