Compliance With the British Society for Surgery of the Hand (BSSH) Guidelines on the Management of Open Hand Fractures Audit

H. John, N. Nagrath
Royal Devon and Exeter NHS Foundation Trust, Exeter, United Kingdom

Aim: British Society of Surgery of the Hand (BSSH) have defined standards for managing open hand fractures. We intended to ascertain our and referring peripheral units' adherence with BSSH's standards of care in managing open hand fractures and determine the associated morbidity.

Method: We performed a 6-month prospective audit reviewing clinical records of patients referred to our department with open hand fractures, to determine whether: antibiotic prophylaxis had been started, and discontinued at definitive closure; wound washout and closure had been performed within 24 hours of injury; patients had continued rehabilitation with hand therapists.

Results: 25 patients sustained open hand fractures in this period. All patients, except 1 who declined, received antibiotic prophylaxis. 19 (76%) had a wound washout and closure within 24 hours of injury. Antibiotic prophylaxis was discontinued at time of definitive closure in theatre in 3 (12%) patients. The remaining 21 patients continued antibiotic prophylaxis beyond 72 hours. 3 (12%) patients developed a wound infection, 2 (6%) of these requiring debridement and irrigation in theatre. Both patients had proximal interphalangeal joint fracture dislocations who underwent a wound debridement within 24 hours of injury, 1 of which was secondary to an animal bite. 22 (88%) patients attended their hand therapy appointment.

Conclusions: The incidence of deep infection requiring subsequent operative debridement remains low in open hand fractures, despite the substandard adherence to BSSH's recommendations. Educating colleagues will improve the adherence to guidance. The BSSH hand injury triage app fulfills this purpose. We intend to raise awareness and encourage its use.