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[O79] INFECTION RELATED READMISSIONS FOLLOWING ELECTIVE ORTHOPAEDIC & TRAUMA SURGERY - EXPERIENCE FROM A MAJOR TRAUMA CENTRE

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Aim: This study was carried out to assess the prevalence of infection related admissions and its consequences in a Major Trauma Centre (MTC). Surgical site infection and deep infection following orthopaedic surgery is rare due to current antimicrobial prophylaxis. However, when post-operative infection occurs, it is associated with high morbidity, poor mobility and even mortality. In addition, there are cost implications for the health service.

Method: Patients with infection related complications post surgery were identified from the Trauma & Orthopaedic Admissions Database at the UHNM. Our one year study period was from 1st April 2014 to March 31st 2015. Information collected included patient demographics, type of infection, procedure details, management, length of stay and clinical outcomes.

Results: During the study period, 3276 patients were admitted or referred from other specialties, of which 74 patients (2.2%) were identified to have post-operative infection. There were 42 males and 32 females with the mean age of 59.7 years (15-96). 44/74 (59%) of infections were seen after elective procedures. 23/45 (51%) of the patients with positive microbiology results had *staphylococcal aureus* infections with a further 3/45 (7%) patients having methicillin resistant *staphylococcus aureus* (MRSA) infections. 36% of the infections were deep with 47% of the patients surgically managed. Nine patients died during admission with seven deaths following infected hip hemiarthroplasty and 2 following infected total hip replacements. The mean length of stay was 14.8 days (1-124).

Conclusions: This study has highlighted the prevalence of infection following elective and trauma surgery in a MTC. Infection was surprisingly found to be higher in the elective patient group. All patients who died had infected hip implants, with seven out of the nine being hip fracture patients. This study has shown that the post-operative infection rate was less than 3%. However, the risk of death following infection was 12%. We have shown that the burden of infection from elective surgery patients was higher than trauma patients.