**Box 1**

## Review of streptococcal PJIs at the Royal Infirmary of Edinburgh

Positive deep cultures for all streptococcal infections presenting to our hospital were linked with the prospective regional joint replacement audit database from 2006 to 2008. The incidence of infection is reported with reference to the total rate of PJI and overall rate of joint replacement.

There were 18 streptococcal PJIs over the three-year study period. The total number of primary hip and knee replacements performed was 4,324. The incidence of PJI after arthroplasty was 2.1%. The total number of microbiologically confirmed PJIs was 128.

Streptoccocal disease accounted for 14.1% of PJIs. There was no difference in the incidence of streptococcal disease between hip and knee replacements, OR 0.7 (95% CI: 0.3-2.0, p = 0.527). The most common species of streptococcus was *S. agalactiae*, a group B streptococcus, (n = 5, 28%).

There were 7 (39%) patients who had a soft tissue cellulitis or pneumonia (*S. pneumoniae*) prior to their PJI. One patient was subsequently found to have a dental abscess after presentation with a PJI. One patient with group G streptococcus died.