

176 Did Hand Washing and Use of Personal Protective Equipment (PPE) Reduce Transmission of Surgical Site Infections During the SARS-CoV-2 Pandemic?

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Aim: A retrospective case-control study comparing Surgical Site Infections (SSIs) following primary hip and knee arthroplasty before and during the SARS-CoV-2 pandemic across East Sussex NHS Trust (ESHT). The aim of this study was to evaluate whether the government advice relating to increased vigilance surrounding hand hygiene and use of personal protective equipment (PPE) reduced SSIs following elective arthroplasty.

Method: Data was obtained from Public Health England website relating to SSIs following primary hip and knee arthroplasty between April 2019 and March 2020 (pre-pandemic) performed at ESHT and compared to April 2020 to March 2021 (pandemic).

Results: A total of 454 patients underwent a total hip replacement (THR) during the pre-pandemic period with 12 patients developing an SSI (2.6%). Comparatively, during the pandemic period, 146 patients underwent a THR with 4 reporting an SSI (2.7%). A total of 449 patients underwent a total knee replacement (TKR) during the pre-pandemic period with 11 reporting an SSI (2.5%). In contrast, 9 of the 138 patients undergoing a TKR during the pandemic group developed an SSI (6.5%).

Conclusions: As the data shows, there was no significant difference observed between SSIs following THR performed at ESHT prior to and during the pandemic. Surprisingly, there was a 2.6-fold increase in SSI following TKR during the pandemic period compared with pre-pandemic. Both of these findings seemingly reject the null hypothesis that increased vigilance to hand hygiene and use of PPE mandated by the government and echoed by healthcare trusts during this time would reduce transmission of infections.