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Abstract (oral session)

**Agreement among healthcare professionals in ten European countries in diagnosing case-vignettes of suspected surgical-site infection (SSI)**

G. Birgand\*, D. Lepelletier, G. Baron, S. Barrett, A.-C. Breier, C. Buke, L. Markovic-Denic, P. Gastmeier, J.A.J.W. Kluytmans, O. Lyytikainen, E. Sheridan, E. Szilagyi, E. Tacconelli, N. Troillet, P. Ravaud, J.-C. Lucet on behalf of the VARSSI Study Group

**Objective.** Although surgical-site infection (SSI) rates are advocated as a major evaluation criterion, the reproducibility of SSI diagnosis is unknown. We assessed agreement in diagnosing SSI among specialists involved in SSI surveillance in Europe. **Methods.** Twelve case-vignettes based on suspected SSI in patients from different surgical specialties were submitted to 100 infection-control physicians (ICPs) and 86 surgeons in 10 European countries. Each participant scored eight randomly-assigned case-vignettes on a secure online relational database. In addition, four physicians and four surgeons in each country scored one case-vignette before and after reading SSI definitions. The intra-class correlation coefficient (ICC) was used to assess agreement for SSI diagnosis on a 7-point Likert scale and the kappa coefficient to assess agreement for SSI depth on a three-point scale. **Results.** Intra-specialty agreement for SSI diagnosis ranged across countries and specialties from 0.00 (95%CI, 0.00-0.35) to 0.65 (0.45-0.82). Inter-specialty agreement varied from 0.04 (0.00-0.62) to 0.55 (0.37-0.74). For all countries pooled, intra-specialty agreement was poor for surgeons (0.24, 0.14-0.42) and good for ICPs (0.41, 0.28-0.61). Reading SSI definitions improved agreement among ICPs (0.57) but not surgeons (0.09). Intra-specialty agreement for SSI depth ranged across countries and specialties from 0.05 (0.00-0.10) to 0.50 (0.45-0.55) and was not improved by reading SSI definition. **Conclusion.** Among ICPs and surgeons evaluating case-vignettes of suspected SSI, considerable disagreement occurred regarding the diagnosis, with variations across specialties and countries. Our results support regular evaluations of SSI diagnosis accuracy across European countries, with case-vignettes probably constituting a valuable educational tool.