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LETTER TO THE EDITOR

Letter to the Editor concerning "The role of environmental and seasonal factors in spine deep surgical site infection: the air pollution, a factor that may be underestimated" by M. Chehrassan et al. (Eur Spine J [2024]: doi:10.1007/s00586-024-08183-z)

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Dear Editor,

We were very fortunate to read the study of Chehrassan et al. [1], which explored the effects of environment, season and air pollution index on surgical site infection after spinal surgery, and reached the following conclusions: 1.Warm season increases the risk of surgical site infection(SSI); 2.Air pollution is closely related to surgical site infection. We are very grateful for the author's contribution, but the study still needs to be further explored.

First of all, the author did not put forward the diagnostic criteria for SSI in the article. The commonly used standards are proposed by The Centers for Disease Control and Prevention(CDC) [2], which are mainly divided into the following three categories: 1.Superficial incisional (involving only skin or subcutaneous tissue of the incision); 2.Deep incisional (involving fascia and/or muscular layers); 3.Organ/space (involving any part of the body opened or manipulated during the procedure, excluding skin incision, fascia, or muscle layers). Secondly, although the authors discussed the possible effects of surgical methods, surgical sites, and surgical types on SSI, the study did not address the effects of surgical complications. It has been reported that cerebrospinal fluid leakage is also an important risk factor for surgical site infection [3]. In addition, although the surgical wound care guidelines recommend aseptic technique compliance, patient education, wound assessment, and documentation practices, there is a clear gap between recommended and observed wound care practices [4], and the study involved multiple medical centers with different standards of care practice. This suggests that we should design the standard of care to reduce errors.

Finally, we would like to thank the author again for his contribution and hope that our discussion can help readers better understand the study.

Declarations

Conflict of interest The authors of this manuscript declare no relationships with any companies, whose products or services may be related to the subject matter of the article.

Ethical approval Does not apply.

Informed consent Does not apply.

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