Infections postopératoires dans la chirurgie rachidienne non-instrumentée: les nouvelles recommandations de la SFAR sur l'antibioprophylaxie ont-elles changé les choses?

Aymeric Amelot* [1], Alexia Planty-Bonjour* [2], Elise Loubeyre* [1]

[1] CHU Tours, Neurochirurgie, Tours, France

INTRODUCTION

Non-instrumented spine surgery (NISS) remains a common procedure. Surgical site infections (SSIs) are common complications. Since 2024, the official French guidelines recommend discontinuing preoperative antibiotic prophylaxis. Prior to 2024, preoperative antibiotics were routinely administered.
We compare the rate of SSIs after NISS in patients operated with vs without antibiotic prophylaxis.

MATÉRIEL ET MÉTHODE :

Single-center retrospective comparative series 651 patients who underwent elective NISS between January 2022 and June 2025
Two successive antibiotic prophylaxis protocols were used: from 2022 to 2023 (group A: prophylactic cefazolin antibiotic approximately 30-60 minutes before the incision) and from 2024 to 2025 (group B: no prophylactic antibiotic).

RÉSULTATS :

Within our series of 651 patients (401 in group A and 250 in group B), we identified 26 surgical site infections. The infection rates were 0.99% in Group A (4/401) vs 8.8% in Group B (22/250) (p=0.002). Infections in group B were more severe, with nearly 50% associated with serious complications (spondylodiscitis, bacteremia and endocarditis). Staphylococci predominated in both groups, but Gram-negative bacilli appeared only in Group B. Multiple logistic regression hazard model identified that ASA score 1 [HR: .027, 95 % CI) .005-.150; p<.0001], ASA score 2 [HR: .038, 95 % CI .008-.119; p<.0001] and prophylactic antibiotics [HR: .048, 95 % CI .011-.202; p<.0001] were independent factors that significantly reduced infections. In contrast, we found diabetes [HR: 3.120, 95 % CI 1.091-8.924; p=.0034] was an independent predictive risk factor for SSI. Obesity (193/651 patients, p=.181) or immunosuppressive treatments (43/651 patients, p=.861) did not appear to be risk factors for SSI.

CONCLUSION :

The elimination of preoperative/pre-incision antibiotic prophylaxis led to a significant (8-fold) increase in SSI incidence and severity. These findings confirm prior data. We hope that this publication supports re-evaluating current French guidelines.