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## Cost-effectiveness of Vancomycin powder for deep wound infection prophylaxis in Spine Fusion

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**Objective:** To identify the cost-effectiveness of Vancomycin powder in the prophylaxis of Posterior Lumbar Spine Instrumentation,

seeking potential savings.

**Method:** A retrospective, observational study was performed to evaluate the cost-effectiveness. Data were retrieved from patients' files from March 2016 to April 2017; costs were considered for the procedures, as well as which antibiotic was used.

**Result:** A total of 184 patients were included. Of these, 102 received prophylactic treatment with 1g of cephalothin and 82 received 1g of cephalothin and 1g of Vancomycin powder, which was applied to the wound before tissue closure. Of the 184 patients, 110 were women (59%) and 74 were men (41%), and the mean age was 55 years (24-77). The participants had a median BMI of 28.9 kg/m2 (19-39). The average cost per hospitalized patient was \$3974 and the average cost of rehospitalization due to infection was, on average, \$7700. The use of vancomycin powder led to cost savings of \$75,008.79 per 100 posterior spinal fusions performed for the degenerative spine.

Conclusion: The use of Vancomycin powder is a cost-effective option for prophylaxis of surgical site infection in spine fusion.

## Biography

Jorge Alvaro Gonzalez Ross completed his training in Trauma and Orthopedics at Dr. Victorio de la Fuente Narváez Hospital (formally known as Magdalena de las Salinas) in Mexico City in 2017. He graduated as Chief Resident and has published his thesis in his third year of residency. He then continued his training in Spine Surgery at Reespalda Foundation at Puerta de Hierro Hospital in Guadalajara, with a short Observership in Schulthess Klinik. He is currently in private praxis and as Assistant Professor at Reespalda – Puerta de Hierro Hospital.

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