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## OC-047 - SURGICAL SITE INFECTION: ASSESSMENT OF INFECTIONS IN OUR ENVIRONMENT AFTER A CRANIOTOMY AND PROPOSED PREVENTION PROTOCOL

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### Resumen

**Introduction:** Surgical Site Infections (SSI) in neurosurgery show a high morbidity and mortality. Many patients with an infection require surgical review. Therefore, knowledge of the associated risk factors is essential to reduce this complication. Likewise, its management and prevention are not standardized in the literature, which is a challenge for the neurosurgeon.

**Objectives:** Determine the risk factors associated with infection in our institution and update our prevention protocols.

**Methods:** Prospective observational study of 246 patients who underwent a craniotomy in our institution throughout seven months with a minimum follow-up of one month. Infections have been defined according to the criteria of the Center for Disease Control and Prevention (CDC). Frequencies and percentages have been obtained. Analysis using Chi-Square, Fisher Test and U-Mann Whitney statistics (statistical significance  $p < 0.05$ ).

**Results:** Twenty-two infections were identified during follow-up (9.1% of the sample) and 13 were organ specific. The mean age at the time of intervention was 57.9 years with an average surgical time of 176 minutes. We performed 155 craniotomies (73%) and 91 Bur-holes (37%). The predominant pathology was oncology (53.3%) followed by chronic subdural hematoma (20.7%). Of the variables studied, infection was significantly related to: CSF leak, the type of craniotomy performed, ICU admission, the number of days admitted and the total number of interventions among others.

**Conclusions:** SSIs are a matter of great concern today given the great impact they have on the patient. It is essential to keep in mind what factors are related and adjust our hospital protocols to reduce and prevent the incidence of this complication.