A499 - The Oral Biofilm Index in patients hospitalized an intensive care unit

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Introduction:
The oral cavity of a patient who has been hospitalized presents a different flora from normal healthy people. After 48h hours of hospital stay, the flora presents a bigger number of microorganisms that can be responsible for secondary infections, like pneumonia, because of their growth and proliferation.

Objective: Assess the dental plaque index on patients on admission to an Intensive Care Unit, and reassess 7 days later, to evaluate the efficacy of oral hygiene.

Methods:
Prospective, descriptive and observational study in an Intensive Care Unit of the CHP. Demographic, admission motive, hospital length of stay, feeding protocol, respiratory support need and oral hygiene protocol data was collected. The Greene & Vermillion Simplified Oral Hygiene Index (IHO-S) was used as the assessment tool on the first 24h and on 7th day.

Results:
74 patients were evaluated, 42 of which were excluded for not meeting the minimal dentition. 32 patients had a mean age of 60.53 ± 14.44 years, 53.1% were males and most of medical and surgical scope (37.5% each). Mean hospital length of stay was 15.69±6.69 days. The majority of patients were sedated (75%), under ventilator support (81.3%) and with enteric nutritional support, under nasogastric tube feeding. Initial IHO-S score was 0.67±0.45, rising to 1.04±0.51 (p<0.05) 7 days later.

Conclusion:
Various studies have proven the importance of a good oral hygiene to avoid bacterial growth and reduce the risk for nosocomial infections. In this study, we’ve observed a significant worsening of oral hygiene one week after admission. Although this could be unimportant for a one week staying patient, it could indicate an increased risk for nosocomial infections for a longer staying patients, which could benefit from a more efficient oral hygiene protocol.