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Preliminary studies on the susceptibility of *Staphylococcus epidermidis* biofilm-released cells to antibiotics and ability to survive in the presence of human blood

Vânia Gaio, Vanessa Acúrcio Gonçalves, Ângela França, Nuno Cerca

CEB - Centre of Biological Engineering, LIBRO - Laboratory of Research in Biofilms Rosário Oliveira, University of Minho, Campus de Gualtar, 4710-057 Braga, Portugal;
vaniagaio13@gmail.com

Worldwide, the formation of bacterial biofilms on the surface of medical devices is a major concern in health care systems due to their high tolerance to antibiotics and ability to evade the host immune system. Biofilm lifecycle involves three stages: 1) adhesion, 2) accumulation and maturation and 3) biofilm disassembly. Biofilm disassembly, in which cells from the biofilm are released to other sites, is thought to be one of the major causes of the emergence of serious complications such as sepsis and embolic events of endocarditis, as observed in *S. epidermidis* biofilm infections. Despite the clinical relevance of these cells, little is known about the phenotypic changes that occur after being released from the biofilm. To overcome this lack of knowledge, we performed a series of *in vitro* assays aiming to compare the susceptibility of planktonic, biofilms and biofilm-released cells to several antibiotics. In addition, the ability of these populations to evade circulating immune cells was also addressed. Interestingly, our results showed that biofilm-released cells presented a different phenotype when exposed to some antibiotics. However, regarding the ability to evade the circulating immune cells, no significant differences among the distinct populations were observed. Thus, these findings indicate that biofilm-released cells present a distinct antimicrobial tolerance that should be investigated in depth, in order to proficiently target, prevent and treat *S. epidermidis* biofilm-relatedinfections.