

**INCREASE OF GRAM NEGATIVE BACTERIA IN CHRONIC LEG ULCERS IN THE LAST 5 YEARS: RESULTS OF A COMPARATIVE CLINICAL INVESTIGATION**

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In our comparative retrospective clinical investigation we examined the bacterial colonisation in patients with chronic leg ulcers between January und December 2007. Altogether 100 patients with 107 leg ulcers were evaluated. 60 patients were female, 40 male. The medial age was 65.01 years. We were able to find 191 bacterial and fungal isolates and 25 different bacterial species. The most common bacterium were *Staphylococcus aureus* (n=60), *Pseudomonas aeruginosa* (n=36) and *Proteus mirabilis* (n=17). In 10 patients we verified a colonisation with MRSA. In 6 patients no bacterial colonisation could be found. A comparable examination was already done in our institution 5 years ago. At that time we found particularly more often a colonisation with MRSA (21.5% vs. 10.0%) and less often *Pseudomonas aeruginosa* (24.1% vs. 36.0%).

The results of our investigation demonstrate the current spectrum of bacterial colonisation in patients with chronic leg ulcers in a German university wound-center compared to the results 5 years ago. We found a drift from gram-positive bacterial species to gram-negative species. After implementation of few hygiene arrangements we were able to decrease the proportion of MRSA positive patients. But now we see a dramatically increase of *Pseudomonas aeruginosa* colonisation. Therefore – beside the well known problem with MRSA – we would like to point at the potentially problematic meaning of *Pseudomonas* species in leg ulcer patients prospectively.