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## The diagnosis of gas gangrene: Does a discrepancy exist between the literature and practice?

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The Infectious Disease Society of America has defined gas gangrene as an infection caused by *Clostridium* species. However, in many clinical settings, soft tissue infections that produce subcutaneous gas have been diagnosed as gas gangrene without identification of the presence of *Clostridium* species. Instead, the diagnosis was based on clinical and radiographic findings. A chart review was performed of 25 consecutive patients treated at the Atlantic Health System for infections of the lower extremity that were diagnosed as gas gangrene. Wound cultures from the 25 patients grew 31 different species of bacteria. The most prevalent organism was *Staphylococcus aureus*, which accounted for 17 of 31 (54.84%) different organisms identified and 19.77% of 86 separate aerobic or anaerobic cultures. The most prevalent genus was *Streptococcus*, which accounted for 20 (64.52%) of the organisms identified and 23.26% of the cultures. The most prevalent anaerobic genus was *Peptostreptococcus*, which accounted for 8 (25.81%) of the organisms identified and 9.3% of the cultures. None of the cultures grew *Clostridium* species. These findings showed that gas-forming soft tissue infections of the lower extremity, commonly diagnosed as gas gangrene, are rarely caused by *Clostridium* species.

### Biography

Maryellen P Brucato is a foot and ankle Surgeon practicing in Bergen County, New Jersey. After she graduated from Temple University School of Podiatric Medicine she completed her surgical residency at Morristown Medical Center. She is very much involved academically as her research has been presented at numerous national conferences and published in academic journals. She currently serves as the Research Coordinator at the Atlantic Health Podiatric Surgery residency program.

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