

Vibrio vulnificus is a halophilic gram-negative bacillus isolated in seawater, fish, and shellfish. Infection by *V. vulnificus* is the most severe food-borne infection reported in the United States of America. Here, we aimed to examine the clinical usefulness of polymerase chain reaction (PCR) using tissue specimens other than blood samples as a diagnostic tool for *V. vulnificus* infection. A retrospective study was conducted with patients who underwent real-time PCR of *toxR* in both blood and skin tissues, including serum, bullae, swab, and operation room specimens, between 2006 and 2009. The median *V. vulnificus* DNA load of 14 patients in real-time PCR analysis of serum at the time of admission was 638.5 copies/mL blood, which was within the interquartile range (IQR: 37-3,225). In contrast, the median value by real-time PCR using the first tissue specimen at the time of admission was 16,650 copies/mL tissue fluid (IQR: 4,419-832,500). This difference was statistically significant ($P = 0.022$). DNA copy numbers in tissues were less affected by short-term antibiotic administration than that in blood samples, and antibiotic administration increased the DNA copy number in some patients. We found, for the first time, that DNA copy numbers in tissues of patients infected by *V. vulnificus* were higher than those in blood samples. Additionally, skin lesions were more useful than blood samples as specimens for PCR analysis in patients administered antibiotics for *V. vulnificus* infection before admission ¹⁾.

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Lee JY, Kim SW, Kim DM, Yun NR, Kim CM, Lee SH. Clinical Usefulness of Real-Time Polymerase Chain Reaction for the Diagnosis of *Vibrio vulnificus* Infection Using Skin and Soft Tissues. *Am J Trop Med Hyg.* 2017 Aug;97(2):443-446. doi: 10.4269/ajtmh.16-0512. PubMed PMID: 28829729.

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