

Summary

Klementová M.: Use of blood culture system BacT/Alert for detection of bacteria present on the surface of vascular catheters.

The number of bacteria present on the surface of vascular catheters was set with the method of quantitative cultivation of vascular catheters by means of blood culture system BacT/Alert on the basis of TTD. The results were compared with the clinical condition of the patient and classical hemocultures.

A total number of 171 vascular catheters was examined with this new method. Positive cultures were detected in 15 (8,8 %) catheters. According to the results of microbiological catheter examination with clinical condition of the patient was found in 94,7 %. False positivity occurred in 2,3 % and false negativity in 2,9 % of cases. On the basis of clinical symptoms 16 cases of catheter sepsis were diagnosed out of which 11 (68,7 %) positive microbiological quantitative examinations of vascular catheters were established. The most frequent pathogen was coagulase negative staphylococci.

The new method, when compared with present methods, is simpler, faster and able to detect the most frequent agent of catheter infection.