

Indirect imprint sampling technique using a filter paper pad for microbial analysis

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The indirect imprint is done by filter paper as the transmission medium. We used filter paper of Whatman No. 4, in a slit size of 5 x 5 cm, which is previously sterilized in an autoclave at 120 °C for 20 minutes and aseptically attached to 24 hours old blood agar.

Filter paper is put on to surface of wound by sterile tweezers and after 10 seconds is removed back on to Petri dish and transported to microbial laboratory.

In microbial laboratory there is filter paper put on to new blood agar, on to UriSelect 4 medium and NaCl blood agar. The cultivation is in the atmosphere with 10% CO₂ and temperature 37 °C. The final control of Petri dishes is after 48 hours.

Result of indirect imprint is semi-quantitative, one part of the result is type of microbe and other is density of them accounted by colony forming unit (CFU), an estimate of viable bacterial numbers in wound, the results is given as CFU/cm².

By this technique we should differ from bacterial colonization and contamination in wound. We received information about microbiota and microbial density. We hope the imprint technique is one of best sampling method for large nonhealing wound and per secundam healing wound before planning resuture.

Biography

Chovanec Zdenek has graduated from Masaryk University at the age of 26 years and is postgraduate student at Masaryk University School of Medicine. He is member of Czech Surgical Society. He has published 2 papers in reputed journals and has given four presentations in international conferences.

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