Identification of Microbial pathogens by Microarray-Based Assay

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Identification of microbial pathogens was successfully carried out with a Microchip. The goal of this study is to develop a diagnostic DNA chip which can be used for the identification of various microbial pathogens causing infectious diseases. The traditional method of diagnosis of pathogens is a cultivation based method which is time consuming and not sensitive enough. Microchip technology might provide an ideal solution1), 2). Here, we propose a new approach to identify various pathogens based on microchip technology. DNA chips containing specific probes for various pathogens were developed under the trade name of PathoChip (Medigenes Co., Ltd., Korea). In the present study, it was concluded that PathoChip facilitates diagnosis of pathogens causing various infectious diseases. It confirms that a simple, rapid, DNA-based method can identify a wide range of clinically significant microbial pathogens. It shows the usefulness of DNA chip technology for diagnosis, which improves not only species identification rates but also to shorten time to the diagnosis.

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