

MONITORING OF SWEAT SECRETION FROM ECCRINE SWEAT GLANDS USING ELECTRIC CONDUCTIVITY METHOD

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Abstract:

Sweat secretion from a single sweat gland can be monitored by using microtube or by visual observation of the skin region using a microscope or video recorder. Another method described in the present paper is based on perfusion with ultra-low conductive water of a small region of the skin with only one sweat pore. Sweat secreted from a gland is rich in ions comparing to perfusion fluid and therefore increases conductivity of the perfusion fluid. Conductivity of the perfusion fluid is measured on inlet and outlet of the measurement probe and the difference is amplified and sampled by an analog-to-digital converter controlled by developed software on PC. The goal of the present paper is to present an improved system of single sweat glands monitoring.

Keywords: single sweat gland, electric conductivity method, sweat gland activity