
What else can explain electrical skin potentials?

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It was carried out simultaneous recording of EMG, GSR (by Tarkhanov) with the broadband bioamplifiers and GSR (by Feret) – with the narrow-band amplifier. Raw EMG recording and skin potential (SP, or GSR, by Tarkhanov) processed by digital filters in the program PowerGraph. In the SP high frequency component has been highlighted previously undetectable by conventional methods of recording. This suggests that SP is a sum signal composed of high-frequency (till 200 Hz) and low-frequency (conventional, less than 1 Hz) components. The phenomenon of "living capacitor" - a SP reaction to the approach of the living or non-living physical body to the ungrounded subject unearthed during monopolar abduction, which can be used as a feedback signal for the formation of the subject's sensitivity to external stimulation usually insensible.

Keywords: electrical myogram (EMG), galvanic skin response (GSR), skin potential (SP), digital signal processing, high-frequency component of the SP

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