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Topic: W13 - Workshop 13: Translation of latest research findings into clinical suicide prevention

Electrodermal Hyporeactivity and Suicide Risk in Depressed Patients

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Background: Electrodermal hyporeactivity has a high sensitivity (up to 97%) and high raw specificity (up to 98%) for suicide.

<u>Aim:</u> To evaluate prevalence, sensitivity and specificity of electrodermal hyporeactivity for suicide and suicide attempt, with and without death intent and with violent method or not, in adult patients with a primary diagnosis of depression.

Methods: The study will be performed at 20 psychiatric clinical centres in ten European countries. Patients with a primary diagnosis of depression, also in remission, will be recruited. Depressive symptomatology will be assessed through the Montgomery-Asberg Depression Scale. Previous suicide attempts will be registered and the death intent of the worst attempt will be rated according to the first eight items of the Beck Suicide Intent Scale. The risk of suicide will be assessed first according to rules and traditions at the centre and eventually revised considering the results of the EDOR Test (ElectroDermal Orienting Reactivity Test). Through headphones a moderately strong tone is presented now and then during the test. Sensors located within gold electrodes, on which two fingers are connected, are able to register the electrodermal response to those tones, measuring the skin conductance. Sensors also register blood volume variation. Recruited patients will be followed-up for one year. During this test period, information concerning possible suicide attempts or completed suicide will be acquired. Methods used and death intent will be also assessed.

Expected results: It is expected that the test of electrodermal hyporeactivity detects a previously unknown neuropsychological dysfunction that is independent of the depressive state and can predict suicidality with a high sensitivity and specificity. The EDOR Test is optimized for detecting hyporeactivity and could be easily included into the everyday clinical practice.