
EMOTION RECOGNITION DEFICIT IN PATIENTS WITH SINGLE RIGHT HEMISPHERE DAMAGE

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Introduction:

Research about psychological manifestations in right hemisphere damage (RHD) has increased in recent decades. The most characteristic alterations affect social cognition, which involves skills related to social interaction, as Theory of Mind, use of humor or metaphors comprehension inter alia. One of them is Facial Emotion Recognition (FER), which has been investigated in brain damaged patients, although studies present small samples and other metodological limitations.

Objectives:

Comparing FER skills in a single RHD patients and non-brain damaged control group.

Aims:

Identifying the FER patterns, analyzing differences according to the type of emotion.

Method:

46 patients with RHD due to stroke (mean age 68.93;SD12.62. 52% males) and 46 control subjects (67.28;SD18.29. 50% males), were assessed in sociodemographic and clinical variables. Mini-mental State Examination and Hamilton Depression Rating Scale were administered. To assess FER, 60 photographs from Pictures of Facial Affect (POFA) collection (Ekman, 1993) were shown to the sample, which identified them according to the type of emotion (i.e. happiness, fear, surprise, sadness, disgust, anger).

Results:

Both samples, despite having similar characteristics, showed significant differences in FER ($T=-2.751;p=0.007$). In total sample, lowest performance was recorded in identifying fear (mean correct answers 0.45;SD0.252) and anger (0.48;SD0.301). RHD patients presented a deficit in FER skill compared to controls. Significant differences were found in recognizing anger ($T=-2.043;p=0.044$), disgust ($T=-2.059;p=.042$), happiness ($T=-2.371;p=0.020$), and sadness ($T=-2.633;p=0.010$).

Conclusions:

Results confirm a probable relationship between single RH and FER, suggesting RH involvement in anger, disgust, happiness and sadness processing.