

## **Review of emotion recognition in stroke patients**

### **Abstract**

**Objective:** Patients suffering from stroke have a diminished ability to recognize emotions. This paper presents a review of neuropsychological studies that investigated the basic emotion processing deficits involved in individuals with interhemispheric brain (right, left) damage and normal controls, including processing mode (perception) and communication channels (facial, prosodic-intonational, lexical-verbal). **Methods:** An electronic search was conducted using specific keywords for studies investigating emotion recognition in brain damage patients. The PubMed database was searched until March 2012 as well as citations and reference lists. 92 potential articles were identified. **Results:** The findings showed that deficits in emotion perception were more frequently observed in individuals with right brain damage than those with left brain damage when processing facial, prosodic and lexical emotional stimuli. **Conclusion:** These findings suggest that the right hemisphere has a unique contribution in emotional processing and provide support for the right hemisphere emotion hypothesis. **Significance:** This robust deficit in emotion recognition has clinical significance. The extent of emotion recognition deficit in brain damage patients appears to be correlated with a variety of interpersonal difficulties such as complaints of frustration in social relations, feelings of social discomfort, desire to connect with others, feelings of social disconnection and use of controlling behaviors.

**Keywords** — Brain damage patients, communication channels, emotion processing, emotion recognition, neuropsychology.