Plenary lecture: The functional neuroanatomy of nonliteral language

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Nonliteral language is a heterogeneous linguistic entity of speech forms that go beyond the literal meaning of the words and require the ability to process more than the literal meaning of an utterance in order to grasp the speakers intention in a given context. Knowledge on the functional neuroanatomy of nonliteral language, that is the brain regions involved in the comprehension process of nonliteral expressions, has dramatically increased during the last decade, mainly because of new brain lesion and functional magnetic resonance imaging (fMRI) studies. Until now, > 60 studies have investigated the brain correlates of nonliteral language including research on metaphor, proverb comprehension, irony and metonymy. I will give a short overview over research techniques and potential future research questions.

Research on nonliteral language comprehension has attracted a lot of interest in researchers investigating the pathomechanisms behind psychiatric disorders like schizophrenia. A subgroup of patients with this psychiatric disease has severe problems in understanding nonliteral expressions. This deficit includes the comprehension of metaphors, proverbs and ironic expressions. Linguistic research on nonliteral language could thus help to disentangle the pathophysiology of severe communication disturbances in schizophrenia. I will demonstrate strengths and limitations of such research based on examples of own research on irony, metaphor and metonymy comprehension in schizophrenia.