Frontotemporal dementia

The roots of social inappropriateness in frontotemporal dementia

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Abnormal social cognition in FTD

Frontotemporal dementia (FTD) remains a difficult diagnosis, often based purely on clinical criteria because standard investigations can be normal.[1] Although the diagnostic criteria of early changes in personal and social conduct certainly hold true, these terms are rather abstract and are subject to multiple interpretations. Eslinger *et al*[2] (***see p 457***), in this issue of the *Journal of Neurology, Neurosurgery and Psychiatry,* make an important contribution to the understanding of social behaviour in FTD. From their and other studies, it has gradually become clear that social behaviour is closely related to the ability to ''read'' other people's minds in combination with a certain level of self-monitoring and insight.

Although the core descriptions of FTD are mainly behavioural and emotional, the cognitive processes underlying these features cannot be overlooked. They play a role in the ability to initiate actions, to inhibit inappropriate responses and to monitor goal-driven behaviour.

In recent years, a small number of studies have dealt with the importance of abnormal social cognition in FTD.[3 4] Subjects with disturbances in the so-called ''Theory of Mind'' have a reduced capacity to read other peoples' minds and feelings, leading to subtle but devastating social inappropriateness and apparent emotional bluntness. In FTD, these are often the first signs noticed by partners and family members.

Theory of Mind normally develops during childhood, with increasing complexity. Tests of social cognition stem from research in autism. They are commonly based on cartoons and written stories, in which subjects have to attribute beliefs and feelings to an imaginary person in a certain social situation. Using tests for social cognition in FTD is facilitated by the relatively intact intellect of these patients, making sure that questions are generally understood and pictures perceived correctly.

Tests of social cognition promise to be of particular value for an early diagnosis of FTD in cases where standard psychometric testing fails to pick up abnormalities, but will they reveal the truth? Even these tests are still miles away from the unstructured and non-artificial reality. The intriguing discrepancy between relatively normal performance on standard executive tasks and gross incapacity of strategic decision making in daily life is well known in FTD. Patients have proved to be capable of giving correct answers to social dilemma questions, while behaving quite differently in real life.

Therefore, identifying and imaging the functional anatomical correlates of social cognition deserve further research. The orbitofrontal or medial frontal lobes have been considered previously as pivotal regions for social cognition. Eslinger *et al,*[2] in their present study, found involvement of a right frontotemporal network. Resolving the structures of social cognition may provide more insight not only into autism, schizophrenia and frontotemporal degenerative disorders but also into the properties that we call ''human''.

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