

**Usefulness of socioemotional informant questionnaires for the clinical detection of the behavioural variant of frontotemporal dementia**

Andrea Panzavolta, Chiara Cerami, Alessandra Marcone, Michele Zamboni, Sandro Iannaccone, Alessandra Dodich

**Background:** Although social cognitive dysfunction is a major feature of the behavioural variant of frontotemporal dementia (bvFTD), performance of social measures has been poorly investigated in clinical settings. The aim of the study is to evaluate diagnostic accuracy of social cognition questionnaires in distinguishing bvFTD from healthy control subjects (HC) and Alzheimer's dementia patients (AD).

**Methods:** We enrolled 29 bvFTD, 24 AD and 18 HC, matched for age, sex and education. Two informant measures of socioemotional sensitivity and empathy (i.e., revised Self-Monitoring Scale – r-SMS and Interpersonal Reactivity Index – IRI) were administered. One-way ANOVA was performed to compare groups, whereas receiver operating characteristic (ROC) curve analysis was used to test ability in distinguishing subjects with and without bvFTD. A shorted version of IRI (sIRI) was obtained by excluding the non-contributing subscale (i.e., personal distress).

**Results:** Compared to HC and AD, bvFTD showed significant impaired scores in both rSMS and IRI, except for personal distress IRI subscale, which did not differ in bvFTD compared to AD and HC. The sIRI score showed an excellent performance in early diagnosis (bvFTD vs HC = AUC 0.95, cut-off 58.5, sensitivity 0.86, specificity 1). Both sIRI and rSMS showed good performances in distinguishing bvFTD from AD (sIRI = AUC 0.83, cut-off 59.5, sensitivity 0.89, specificity 0.70; rSMS = AUC 0.80, cut-off 43, sensitivity 0.86, specificity 0.70).

**Conclusion:** ROC analysis supports the usefulness of informant social questionnaires in the early and differential diagnosis of bvFTD and as possible outcome measures in forthcoming trials.

**Conflicts of interest**

N/A