SUPPLEMENTAL TABLE

| SUPPLEMEN | Aim of the Study | Number of Patients/Mean Age/Mean Disease Duration | Assessment Methods | Main Findings |
|------------------------|--|--|---|--|
| | | | TBI | |
| Williams et al. 2001 | To investigate alexithymia in a TBI population | 135 patients | TBIQ TAS-20 | 49% of patients had a history of head injury. 18% of these were alexithymic |
| Becerra et al. 2002 | To investigate alexithymia in a patient with TBI | Case report, 1 M, age 21 (diffuse TBI, | Complete neuropsychological test battery | Impaired verbal and nonverbal learning and memory. |
| | | mostly parietal and frontal damage bilaterally) | | TAS-20 score: 71 post TBI, 41 pre TBI Moderate depression |
| Koponen et al. 2005 | To evaluate the prevalence of alexithymia in TBI patients. To evaluate how the severity of TBI, the | | TAS-20 | Alexithymia was significantly higher in patients with TBI (31.5% versus 14.8%; OR 2.64, 95% CI 1.03–6.80) |
| | MRI findings, and the presence of axis I and II psychiatric disorders may modify the prevalence of | 54 HC | BDI | Severity of TBI, the presence, laterality, or location of contusions on MRI, were not associated with the TAS-20 total score |
| | alexithymia after TBI | | SCAN | 15/17 alexithymic patients had a |
| | Ž | | SCID II | psychiatric disorder; significant |
| | | | MRI | associations were observed on both axis I and axis II: axis I disorder or anxiety |
| | | | | disorder was associated with significantly higher TAS–20 total scores; axis II disorder, personality disorder or organic personality syndrome had significantly higher TAS–20 total scores |
| Henry et a 2006 | To evaluate the prevalence of alexithymia in TBI, to evaluate whether alexithymia was related to deficits in executive functions and its relationship with anxiety, depression and quality of life | (MRI in 18: 10 bilateral | TAS-20 | Patients showed greater levels of alexithymia in total TAS–20 score than HC (32.1% versus 12.9%) |
| | | | Verbal fluency | TBI patients were more depressed but |
| | | | (phonemic, semantic and alternating fluency task) | not more anxious. |
| | | | task) | |
| | | 31 HC | HADS | DIE subscore of TAS-20 was associated with poorer quality of life, even after controlling for depression and anxiety. |
| | | | LEIPAD (quality of life) | DIE subscore was inversely correlated with executive function deficits (semantic and alternating fluency) |
| Wood et al. 2007 | To examine the prevalence of alexithymia in a TBI population, and its | e 121 TBI patients | Neuropsychological evaluation (test battery) | The TBI cohort (57.9%) recorded a significantly higher prevalence rate of alexithymia than orthopedic controls (15.4%). |
| | relationship to injury severity, neuropsychological ability and affective disorder. | 52 orthopedic patients as controls | TAS-20 | A significant between group difference was only evident for the cognitive domains "Verbal Ability" (Vocabulary, Similarities, Comprehension), and "Sequencing" (Digit Span, Letter-Number Sequencing, Spatial Span). |

| | | | BDI | In both domains, higher scores on the TAS-20 were associated with poorer |
|------------------|--|------------------|--|--|
| | | | BAI | cognitive performance. Regression analyses: alexithymia, depression, and anxiety should be considered distinct, but overlapping |
| Wood et al. 2009 | To evaluate the relationship between alexithymia, affective distress and somatization in a TBI sample | 83 TBI patients | TAS-20 SCL-90-R and its 3 dimensions: anxiety, depression and somatization | constructs. 63.9% TBI patients were alexithymic Alexithymic patients reported greater somatization rating, more anxiety and more depression Regression analysis: after correcting for anxiety and depression only subscale DIE make a significant unique contribution to explaining somatization rating. |
| Wood et al. 2013 | To examine the influence of 2 personality constructs: alexithymia and anxiety | | TAS-20 | mTBI shower >anxiety sensitivity and alexithymia, psychosocial distress (BDI-II) and PC symptoms |
| | sensitivity on level of psychological distress and PC symptoms in the acute recovery stage of mild TBI | 61 HC | Rivermead PC questionnaire | Regression analyses indicated that anxiety sensitivity score were significant predictors of PC symptoms and levels of psychological distress. |
| | | | Anxiety sensitivity index | mTBI alexithymic group reported higher PC symptoms and psychological distress. |
| | | | STAI | Regression analysis showed that TAS to score predicted a significant amount of variance in PC symptoms and psychological distress. Only TAS–20 subscale DIE and DDE had large significant positive correlation with PC symptoms. |
| | | | BDI | Regression analyses (do anxiety sensitivity, alexithymia, psychological distress predict PC symptoms?): anxiety sensitivity and depression account for 52.6% of the variance, alexithymia failed to make a significant contribution. |
| Wood et al. 2010 | To evaluate the frequency of suicide ideation following TBI and its relationship with alexithymia, depression, hopelessness and | 105 TBI patients | TAS-20 | TBI had higher frequency of suicide ideation (33%), hopelessness (84.8%) and worthlessness (61%) on the BDI; higher rating of depression in the suicide ideation group of patients (74.3%). |
| | worthlessness in a TBI sample | 74 HC | suicidal thoughts or wishes and of hopelessness and | Patients reporting suicide ideation had higher TAS-20 (DIF subscale only) Logistic regression analyses found that worthlessness was the strongest predictor of suicide ideation after TBI. |
| Wood et al. 2013 | To examine the relations among coping styles, alexithymia, and psychological distress following TBI. | 71 TBI patients | TAS-20 | The participants with TBI exhibited significantly higher rates of alexithymia and psychological distress and lower levels of task-oriented coping than healthy controls. |
| | | 54 HC | Estonian COPE-D | Levels of avoidance coping and psychological distress were significantly higher in a subgroup of |

| | | | BDI | TBI patients with alexithymia than in a nonalexithymic TBI subsample. There were significant relations among alexithymia, avoidance coping, and levels of republicational distress. |
|----------------------|---|---|--|---|
| | | | DAI | levels of psychological distress. Regression analysis revealed that difficulty identifying feelings was a significant predictor for psychological distress. |
| Williams et al. 2010 | To evaluate the presence of alexithymia and low | 64 TBI | TAS-20 | Alexithymia in TBI patients (60.9%) was higher than in HC (10.9%). |
| 2010 | emotional empathy following TBI and to | 64 HC | BEES | TBI patients (64.1%) had lower emotional empathy than HC (34.4%) |
| | examine the relationship between alexithymia and emotional empathy. | | Wechsler Adult Intelligence Scale | Regression analysis: 72% of alexithymic TBI had a low emotional empathy (moderate negative correlation between TAS-20 and BEES) No significant correlations between alexithymia, emotional empathy, injury |
| Williams et al. 2013 | To evaluate the relationship quality and satisfaction in couples after TBI of one partner and to explore the impact | 47 TBI and their | TAS-20 | severity, and time since injury. TBI reported significantly fewer relationship problems than their partners (IMS total $p\geq0.01$; DAS tot $p\geq0.05$ and satisfaction subscore $p\geq0.05$) |
| | of alexithymia on it. | 47 partners | IMS | Significant positive relations between length of relationship and partner rated DAS consensus and affectional expression; positive correlation between number of relationship problems IMS and time since injury and presence of children. |
| | | | DAS and its subscales (satisfaction, consensus, cohesion, affection expression) | Partners of TBI alexithymic patients reported poorer DAS scores than partners of non alexithymic ones. |
| Neumann et al. 2013 | To compare the differences in alexithymia, empathy and affect recognition in TBI patients | | TAS-20 | 30% of TBI had alexithymia and 3.3% of HC |
| | compared with HC To determine the amount of affect recognition and empathy variance explained by alexithymia | 60 HC | DANVAS-2 | TBI: lower score at TAS–20 (p≤0.005) and empathy (p≤0.005) TBI had more difficulties in facial and vocal affect recognition. Facial and vocal affect recognition variances were significantly explained by alexithymia (12% and 8%, respectively) but the majority of variance was accounted for EOT subscale of TAS–20. Affect recognition and alexithymia |
| Ho et al. 2013 | To illustrate possible neural underpinnings of alexithymia resulting from occipital lobe damage | Case report: 1 F, age 46 survivor of a severe childhood TBI (damage at | Complete neuropsychological test battery | significantly accounted for cognitive empathy (16%). Normal Neuropsychological profile except for an attentional dysfunction (digit vigilance test). |

| | | primary visual | | |
|-------------------------|--|---|---|---|
| | | cortex) Visual deficit: hemianopsia | Eyes test Faux pas test TAS-20 and Bermond- Vorst alexithymia questionnaire Interpersonal reactivity index EQ 16 Visual Imagery task HADS ROKE | High alexithymia score (TAS–20: 63) and low empathy (EQ 16) All other scales scores are in the normative range |
| Spalletta et al 2001 | To confirm the hypothesis that RBD contributes to the development of alexithymia in stroke patients. To detect which dimension of alexithymia is associated with the laterality of the brain damage. | 48 stroke patients/ 21 RBD: 68.6±12.1; 27 LBD: 61.6±13.6/RBD: 143.5±178.6; LBD: 145.0±169.1 | SCID | RBD patients had more alexithymic features than LBD patients (48% versus 22%) on DIE and DDF but not in EOT (even after controlling for general cognitive level, anxiety, and depression). |
| | To evaluate the influence of gender on alexithymic features. | days. | STAI-S BDI TAS-20 Barthel index Neuroimaging (location and size of the lesion) | Significant effect of gender on TAS–20 in RBD and LBD patients (male with RBD had higher score at TAS–20 than male with LBD) No differences in terms of lesion location between the two groups. |
| Spalletta et al. 2007 | To investigate the relationship among anosognosia, neglect, alexithymia, and cognition in stroke patients | 6 patients with anosognosia; 66.1±14.4 without anosognosia/44 4±26.5 days in patients with anosognosia; 37.6±19.9 | TAS-20 Anosognosia scale (Bisiach et al.) Neglect: line crossing, letter cancellation, figure and shape copying, line bisection | 26% patients showed anosognosia of motor impairment, 52% alexithymia, 52% unilateral spatial neglect, 20% major depression Higher alexithymia in patients with anosognosia than patients without it, DDE subscore F2 was the only significantly different in the two groups. Anosognosia and alexithymia rates were not statistically associated. Regression analysis: presence of neglect and more difficulty in describing feelings (TAS–20 F2 subscore) were the only predictors of |
| Cravello et al. 2009 | To evaluate the effect of SSRI venlafaxine and fluoxetine on alexithymia severity in patients with poststroke depression | 50 patients with first-event stroke and post stroke depression were | HAM-D TAS-20 | anosognosia. Anosognosics with alexithymia performed worst in frontal task than pure anosognosics (verbal fluency and verbal span forward task) Patients of both groups improved in depression. Patients treated with venlafaxine, both those alexithymic at baseline and those not alexithymic had a greater |

| Wang et al. 2011 | | stoke/75.23±10. | treatment. At 1 month (T1) and 3 | improvement on alexithymia severity than patients treated with fluoxetine even when using a covariate baseline HAM-D score. 30% of the patients were diagnosed with full PTSD at T1, at T2 23.1% |
|-----------------------|--|--|--|---|
| | stroke. | days 87% ischemic, 13% hemorrhagic, (67% right- sided lesion) | MMSE TAS-20 Post-traumatic stress diagnostic scale | At T1 no change in severity of PTSD symptoms but significant reduction of psychiatric comorbidity. At T1: Alexithymia was associated with severity of poststroke PTSD and psychiatric comorbidity. DIF had the strongest correlation. At T2: After adjusting for PTSD, psychiatric comorbidity, physical |
| | | | General health questionnaire Barthel index | disability and time from the stroke occurrence, there was no significance association between alexithymia and severity of poststroke PTSD and psychiatric comorbidity 3 months poststroke. |
| Tojek et al. 2000 | To compare patients with PNES and patients with epilepsy on stressful life events and psychosocial risk factors for somatization as well as on alexithymia | 25 patients with PNES and 33 patients with epilepsy/43.56+ 13.23 versus | | PNES had >stress life events, higher rating of stressfulness of the events, total stress score, greater somatic symptoms, greater anxiety and depression, more hypertension and ulcers than epileptic patients No difference in psychotic symptoms, in illness worry or alexithymia. Both groups had higher alexithymia than community norms (approx. 30% in both groups) |
| Bewley et al. 2007 | To investigate whether alexithymia might distinguish patients with psychogenic non epileptic seizures from those with epilepsy and nonpatient controls | 21 patients with PNES, 21 patients with epilepsy, 21 healthy controls | TAS 20 BDI-II BAI | Overall TAS-20 scores did not differentiate the three groups after controlling for anxiety and depression, but scores on certain subscales of the TAS-20 differed significantly between the patient groups and the controls |
| Kalinin et al 2010 | To evaluate the effect of seizure lateralization, handedness, and alexithymia on psychopathology in patients with temporal lobe epilepsy | 105 temporal lobe epilepsy patients (40 symptomatic, 53 cryptogenetic, 12 idiopathic) L side focus in | ICD-10 criteria for a psychiatric assessment HAM-D | 25 patients had high alexithymia Alexithymia score itself does not |

| - | | 52; R sided | | depend on handedness and focus |
|------------------------|---|---|---|--|
| | | focus in 53 | HAM-A | laterality. Alexithymic patients had higher SCL– 90 and HAM-D scores than |
| | | | SCL-90 | nonalexithymic. Left-handed and right handed patients significantly differ on: somatization, depression and SCL–90 score (right- |
| | | | TAS-26 Annett's scale for handedness | handed had higher score) Alexithymia has maximal effect on psychopathological variables, and maximal scores of SCL–90 were reported in patients with alexithymia/left-handedness and alexithymia/right-sided seizure focus combinations. |
| Kaplan et al. 2013 | To compare PNES and ES in terms of alexithymia, early childhood trauma and immature defensive styles. | 94 PNES (41.06+12.81) 81 ES (39.15+12.98) | Childhood trauma questionnaire TAS-20 REM-71 | 38/94 PNES and 21/81 ES scored >60 at TAS-20: a significant difference of 14% in the prevalence of alexithymia. Significant difference in TAS-20 total score and subscale DIE (PNES more alexithymic) |
| Hingray et al. 2011 | To assess psychiatric comorbidity, alexithymia and dissociation in patient with PNES. | absence of trauma antecedents: 19 | Clinical interview Clinical and semistructured | Alexithymia was high in both groups (no percentage given, only median scores)). The trauma group scored higher on DDE (p=0.033) |
| Chung et al. 2013 | | | Post-Traumatic Stress Diagnostic Scale | 81% of patients met the criteria for PTSD (51% for full PTSD; 30% partial PTSD) |
| | the relationship between | | HADS | Epileptic more depressed and anxious |
| Chung et al | alexithymia traits and the severity of them. | (30.29+9.67) | TAS-20 | than controls 41% of epileptic high level of alexithymia (no control group, the13% median level was used) Regression analysis: DI consistently predicted postepileptic seizure PTSD and psychiatric comorbidity, it was correlated with elevated post epileptic seizures PTSD and depression, it was negatively correlated with anxiety. |
| Chung et al. 2013 | PTSD and psychiatric | e populations of c Chung et al. s 2013 (above) e | As above + Generalized self- efficacy scale | As above + Self-efficacy was significantly and negatively correlated with alexithymia and with postepileptic seizure PTSD. Alexithymia was also significantly and positively correlated with postepileptic seizure PTSD and psychiatric comorbidities. |

| Brown et al. | To study emotional | 43 PNES (42- | Difficulties in Emotion | PNES higher score at TAS-20 total and |
|------------------------|--|---|--|--|
| 2013 | dysregulation, alexithymia, attachment | 27 years, age) | Regulation Scale | subscores but did not reach statistical significance. |
| | and psychopathology in | 24 ES (43.5-26 | TAS-20 | Cluster analyses: Cluster 1 (N=11 |
| | patients with PNES and ES | years, age) | Relationship scales questionnaire Generalized anxiety disorder–7 Patient health questionnaire 9 Somatoform | patients with PNES) high level of emotional dysregulation and alexithymia, more anxiety, depression and somatization compared with cluster 2 PNES and ES. |
| | | | dissociation questionnaire–20 | |
| Myer et al. 2013 | To assess coping strategies employed by patients with PNES and determine | | Coping Strategy for Stressful-Situations | 60.9% of patients endorsed using at least one coping strategy that was 1.5 SD away from normal adult mean. |
| | whether these approaches were associated with other maladaptive psychological features. | | State Trait Anger expression scale–2 | 30% used the less effective Emotion- oriented coping strategy (Emotion- Focus coping strategy); 25% underused the most effective one (Task oriented coping strategy). |
| | | | TAS-20 | Alexithymia (TAS–20 score) significantly correlated with Emotion- |
| | | | TSI-II | Focused coping strategy. Task-Oriented strategies were |
| | | | MMPI 2-RF | significantly associated to low |
| | | | Test for Memory Malingery Wechsler Abbreviated Scale of Intelligence | alexithymia scores. |
| Myers et al. 2013 | To determine the prevalence rate of alexithymia | 66 consecutive patients with PNES and 35 | | Prevalence of alexithymia in PNES and ES of 36.9% and 28.6%, respectively (not a significant difference). |
| | in patients with | patients with ES | TSI-II | In PNES patients: a significant correlation between alexithymia and anxious arousal, intrusive experiences, dissociation, and defensive avoidance |
| | To identify the predictors of alexithymia in patients with PNES. | | MMPI 2-RF | from the TSI-II |
| | | | MS | |
| Bondini et al. 2008 | To assess alexithymia in a group of patients with relapsing-remitting MS and its role as a factor contributing to the presence and severity of fatigue and depression. | 58 Relapsing-remitting MS patients/34.8±9 3/9.1±5.5 | Expanded disability status scale (EDSS) | EDSS 1.5. Alexithymia prevalence 13.8%. No significant differences in demographic and clinical characteristics in relation to alexithymic features, except for higher levels of fatigue (FSS, Alexithymic: 5.3±1.0, Nonalexithymic 3.9±1.0; p<0.002) and depression (BDI, Alexithymic: 18.0±12.3, Nonalexithymic: 7.1±7.8; p<0.007). |
| | | | TAS-20 | Among the alexithymic group (8 patients in total), 7 (87.5%) were fatigued and 6 (75%) were depressed, whereas in the nonalexithymic group (37 patients in total) 18 (52.9%) were fatigued and 7 (20.6%) depressed (p=0.06 for fatigue and p=0.02 for depression). There was a significant correlation between alexithymia and |

| | | | | fatigue (rho=0.5; p<0.001) and between alexithymia and depression (rho=0.37; p<0.004). |
|------------------|--|---|--|--|
| | | | Fatigue severity scale (FSS) BDI | p<0.004). |
| Gay et al. 2010 | To clarify the relationship between depression and the factors associated with it (among them | patients/47.22± | EDSS | EDSS: 4.75±2.45. Depression prevalence 25.9% (20.5% moderate, 5.4% severe); anxiety prevalence 36.3%; alexithymia 23.2%. |
| | alexithymia). | 10.5 | Depression self-rating scale | Depressive symptoms were strongly associated with trait anxiety, state anxiety, alexithymia and emotion-centered coping. |
| | | | STAI | The depressive symptoms were |
| | | | TAS-20 | moderately and negatively associated |
| | | | Self-esteem inventory | with self-esteem, social support. They |
| | | | Social Support | were moderately and positively associated with EDSS. |
| | | | Questionnaire | associated with EDSS. |
| | | | Coping about Health Injuries and Problems | |
| Prochnow et al. | To examine the level of | 35 MS patients | 3 | EDSS:6 |
| 2011 | emotion processing in MS | | | |
| | patients evaluating the performance in test of | 8.4 61 healthy | BDI | MS patients were significantly more |
| facial a | facial affect recognition and alexithymia. | control subjects 33.5±11.5 | | depressed compared with healthy controls (MS 17.1% depressed and 28.6 moderately depressed) versus HC |
| | | | | 21.3% moderately depressed. |
| | | | TAS-20 | Alexithymia: MS 25.7% versus HC 16.4% |
| | | | Benton facial | The MS patients made significantly |
| | | | recognition test | more mistakes in both facial affect |
| | | | Faces symbol test | recognition tasks (PCFAE and Ekman–60-Faces test). In detail, MS patients |
| | | | Ekman–60-Faces test Perceptual Competence | |
| | | | of Facial Affect | controls on the PCFAE emotions fear, |
| | | | Recognition (PCFAE) | surprise, anger, and sadness, while they did not differ from healthy controls on |
| | | | | disgust and happiness. |
| Chahraoui et al. | To investigate the course | Baseline: 62 | EDSS | Prevalence of alexithymia of 30.6% at |
| 2014 | of alexithymia and its relation with anxiety and depression in patients with | patients/41.37 <u>+</u> 10.86/10.92 <u>+</u> 8.66 | | T1 and 29.5% at T2(not a significant difference). |
| | MS, over a period of 5 years. | At 5 years follow-up: 44 patients | TAS-20 | Anxiety 19.4% at T1 and 20.5% at T2; moderate depression 32.3% at T1 and 22% at T2; severe depression 8.1% at |
| | | | BDI | T1 and 4.9% at T2. Increase in EDSS score at T2 showed a |
| | | | БИ | slight progression of the level of handicap (+0.76) |
| | | | STAI | No significant correlation was observed |
| | | | | between alexithymia and any of the demographic or clinical variables |
| | | | | recorded. Alexithymia scores were |
| | | | | mainly positively correlated with anxiety and depression at T1 and T. |
| | | | | Multiple regression: anxiety and the |
| | | | | number of relapses as being |
| | | | | significantly related to the presence of |

| | | | | alexithymia at T2. |
|------------------------|--|---|---|--|
| Costa et al. 2006 | To investigate the relationship between alexithymia and depression in PD | 58 PD patients: 3 groups: major depression patients: N=12/70.2+5.2, 9.5+4.6; minor depression patients: N=20/65.3+8.8, 8.0+4.9; nondepressed patients: | TBDI TAS-20 UPDRS H&Y | Depression: 20.7% had a major depression (MD) 34.5% had a minor depression (miD) 39.6% no depression (ND) Alexithymia: 20.7% alexithymic; 22.4% borderlines. Depression/alexithymia: MD more alexithymic than ND (0.01) MD more alexithymic than MiD (0.06) MiD versus ND: no differences Regression analysis: |
| Costa et al. 2007 | To investigate the neuropsychological correlates of alexithymia | N=23/63.8/10.6 /4.4+2.3 70 PD and 70 orthopedic disease operipheral |)TAS-20 | Higher BDI score predicts higher alexithymia Alexithymic PD performed worse than controls with or without alexithymia on tasks requiring visual-spatial processing. |
| | | pathologies/64. | episodic memory, executive functions, abstract reasoning, and visual-spatial and language abilities | Regression analyses: in PD patients, but not in controls, poor performance on a constructional praxis task predicted high scores on the TAS-20 subscale (F1) |
| Costa et al. 2010 | To investigate alexithymia in PD | 70 PD patients and 70 HC | TAS-20 | 21.4% of PD and 10% of HC are alexithymic. Univariate analyses: PD differ only in the subscale "difficulty describing and communicating feelings" |
| Poletti et al. 2011 | To investigate the prevalence of alexithymia in de novo PD patients and its relationship with depression | | TAS-20 GDS-15 MMSE | In de novo patients alexithymia has a prevalence of 23.8%; in HC 16.6% No difference in alexithymia frequency between PD and HC. Both alexithymic PD and HC were |
| Poletti et al. 2011 | To investigate how alexithymia might influence decision making in de novo PD | 24 de novo PD/65.04+6.23 | UPDRS-II, III IGT TAS-20 | more depressed than non alexythimic. De novo PD versus HC: no differences in alexithymia, depression and decision making Alexithymic outperformed the non alexithymic only in the central IGT block |
| | | | GDS-15 MMSE/FAB | No difference between depressed PD and no depressed PD Correlation analyses: TAS-20 and GDS-15 correlate with age and MMS/FAB. TAS-20 F1 correlates positively with second block of IGT ^{21-39.59} and negatively with last 2 blocks (61-100) |
| Poletti et al. 2011 | To investigate the association between alexithymia and clinical motor subtypes in de novo PD | 42 de novo PD/64.97+7.87 | TAS-20 GDS-15 MMSE UPDRS II-III PD were classified in PIGD | 23.80% were alexithymic PIGD-PD reported higher score than MIX-PD in GDS-15 (<0.05), TAS-20 total score and subscores (<0.05) PIGD had higher scores than TD in TAS-20 F2 (difficulty describing feelings) |

| | | | TR | |
|-------------------------------|--|--|---|---|
| | | | MIX | |
| Assogna et al. 2012 | To investigate whether alexithymia in PD is primarily linked to the disease process or to depressive symptoms or other sociodemographic and clinic characteristics | 100 PD patients (71.7+5/6.2+6 years) 100 geriatric patients (control group) (72.7+4.4) | | Twice as many PD as control patients had categorical alexithymia (11% controls, 22% PD) PD was mainly associated with DIF After adjusting for sociodemographic factors, antidepressant use and BDI score PD had 4 times higher odds of having categorical alexithymia than |
| Goerlich-Dobre et al. 2013 | To investigate whether alexithymia is an independent risk factor for ICDs in PD (contributing independently from impulsivity, anxiety and depression to ICD). | 91 PD/62.3+8.8/8. 5+5.7 years | BIS-BAS Emotion regulation questionnaire BDI-II BAI | controls. 52/91 PD (57.1%) had at least 1 ICD 16/91 (18%) were alexithymic Alexithymia correlates with ICDs (q=0.381, p \leq 0.001) especially DIE and DDE. ICDs positively correlate with impulsivity (q: 0.194, p \leq 0.05) with anxiety (q=0.316, p \leq 0.01) and depression (q=0.348, p \leq 0.01). They negatively correlate with behavioral inhibition (q= \sim 20.31, p \leq 0.01) and behavioral approach (q= \sim 0.20, p \leq 0.05) |
| Gudel 2004 | To investigate the autonomic and motor reactivity to an emotional and a cognitive stressor in high- versus low-alexithymic cervical dystonia patients | alexithymia score. Stress inducing cognitive and | | HR, SCL and NS.SCF were lowest during the baseline and the intertask relaxation periods, but they clearly increased during the Stroop Test and the Stress Interview. |
| Tinkler Iris et al. | To clarify if HD patients have deficit in expressing emotions and understanding their feeling | and 13 controls matched for age | expression (patients emotion facial expressions were video | No difference in alexithymia and empathy between HD patients and HC (p=0.98). Both recognition and expression were impaired across different emotions in HD compared with controls and |
| | | | recorded and rated by external raters) TAS-20 Empathy: IRI, BEES MRI (for caudate atrophy evaluation) UHDRS | recognition and expression scores were correlated. |

BAI: Beck Anxiety Inventory; BDI: Beck Depression Inventory; BEES: Balanced Emotional Empathy Scale; BIS-BAS: Behavioral Inhibition/Approach Scale; CD: cervical dystonia; DAS: Dyadic Adjustment Scale; DDE: difficulty describing emotions; DIE: difficulty identifying emotions; EDSS: Expanded disability status scale; EOT: externally orientated thinking; EQ-16: Empathy Quotient; ES: epileptic seizures; F: female; FAB: Fullerton Advanced Balance Scale; GDS-15: Geriatric Depression Scale Short Form; H&Y: Hoehn and Yahr Scale; HADS: Hospital Anxiety and Depression Scale; HAM-D: Hamilton Rating Scale for Depression; HAM-

A: Hamilton Rating Scale for Anxiety; HC: healthy controls; HD: Huntington's Disease; HR: heart rate; ICD: impulse control disorders; ICD–10: International Classification for Diseases; IGT: Iowa Gambling Task; IMS: Index of Marital Status; IRI: Interpersonal Reactivity Index; L: left; LBD: left brain damage; M: male; MMSE: Mini Mental State Examination; MIX: mixed motor subtype; MMPI 2-RF: Minnesota Multiphasic Personality Inventory–2-RF; mTBI: mild traumatic brain injury; NPS: neuropsychological; NS.SCF: nonspecific skin conductance fluctuations; PD: Parkinson's Disease; PC: postconcussional; PIGD: postural instability gait difficulty motor subtype; PNES: psychogenic nonepileptic seizures; PTSD: posttraumatic stress disorder; QUIP-RS: Questionnaire for Impulsive-Compulsive Disorders; R: right; RBD: right brain damage; REM–71: Response Evaluation Measure; ROM: range of motion; SCAN: Schedules for Clinical Assessment in Neuropsychiatry; SCID II: Structured Clinical Interview for DSM-III-R Personality Disorders; SCL: skin conductance level; SCL–90-R: Symptoms Check List; ST: skin temperature; STAI: State Trait Anxiety Inventory; SSRI: selective serotonin reuptake inhibitors; TAS–20: Toronto Alexithymia scale; TBI: traumatic brain injury; TBIQ: Traumatic Brain Injury Questionnaire; TR: tremor dominant subtype; TSI-II: Trauma Symptoms Inventory II; UPDRS: Unified Parkinson's Disease Rating Scale; VAMS: Visual Analog Visual Scale.