

SUPPLEMENTARY MATERIAL

Hospital Anxiety and Depression Scale (HADS)

The Hospital Anxiety and Depression Scale (HADS) is a patient reported outcome measure designed to assess anxious and depressive symptoms [1]. It contains fourteen items, seven related to anxiety and seven to depression. Each item is rated on a four-point Likert scale ranging from 0 to 3, thus providing a maximum score of 21 points for anxiety and 21 points for depression. A score of seven or less is considered normal and a score of >10 represents clinically-relevant anxious or depressive symptoms.

Coping Inventory for Stressful Situations scale (CISS)

The Coping Inventory for Stressful Situations scale (CISS) [2] is a 48-item self-report questionnaire which assesses the strategies used by individuals to cope with a stressful situations. The items are divided into three sixteen-item dimensions relating to three specific coping strategies, namely task-oriented (looking for information, actions and results), emotion-oriented (efforts to control emotional tension or expression of emotions resulting from stress), or avoidance-oriented (systematic efforts to avoid confrontation with the stressful element). Task-oriented coping is considered to be adaptive, whereas avoidance-oriented and emotion-oriented coping are considered to be generally non-adaptive. Each item is scored on a five-point Likert scale, and the sum of the scores for each of the three dimension scores allows the dominant coping style to be determined as the dimension score with the highest score.

Impact of Events Scale-Revised (IES-R)

The IES-R [3] is a 22-item self-report measure that assesses subjective distress caused by traumatic events, originally designed to screen for post-traumatic stress disorder. It is a revised version of a previous 15-item version [4]. Respondents are asked to identify a specific stressful life event and then indicate how much they were distressed or bothered

during the past seven days by each "difficulty" listed. Items are rated on a 5-point scale ranging from 0 ("not at all") to 4 ("extremely"). The IES-R yields a total score (ranging from 0 to 88) and subscale scores can also be calculated for the Intrusion, Avoidance, and Hyperarousal subscales. A score ≤ 11 indicates few or no symptoms of stress and a score ≥ 33 highly symptomatic stress (most people with this score have post-traumatic stress disorder).

Modified Fatigue Impact Scale for Multiple Sclerosis (MFIS-MS)

The modified Fatigue Impact Scale for-Multiple Sclerosis (FIS-MS) [5] is a modified form of the Fatigue Impact Scale [6] based on items derived from interviews with MS patients concerning the impact of fatigue on their lives. This instrument provides an assessment of the effects of fatigue in terms of physical, cognitive, and psychosocial functioning. The full-length MFIS consists of 40 items scored on a five-point Likert Scale. The total score for the MFIS is the sum of the scores for the 40 items, with possible scores ranging from 0-160. A score of >55 is considered to represent high fatigue impact.

REFERENCES

- [1] Zigmond AS, Snaith RP. The hospital anxiety and depression scale. *Acta Psychiatr Scand* 1983;67:361-70.
- [2] Endler N, Parker JDA. Assessment of multidimensional coping: Task, emotion, and avoidance strategies. . *Psychological Assessment* 1994;6:50-60.
- [3] Weiss DS, Marmar CR. The Impact of Event Scale - Revised. In: GuilfordPress, editor. Wilson JP, Keane TM, editors. Assessing psychological trauma and PTSD. New York1997. p. 399-411.
- [4] Horowitz M, Wilner N, Alvarez W. Impact of Event Scale: a measure of subjective stress. *Psychosom Med* 1979;41:209-18.
- [5] Multiple Sclerosis Council for Clinical Practice Guidelines. Fatigue and multiple sclerosis: evidence-based management strategies for fatigue in multiple sclerosis. Washington DC, USA: Paralyzed Veterans of America, 1998.
- [6] Fisk JD, Ritvo PG, Ross L, Haase DA, Marrie TJ, Schlech WF. Measuring the functional impact of fatigue: initial validation of the fatigue impact scale. *Clin Infect Dis* 1994;18 Suppl 1:S79-83.

List of Investigators

- MOREAU Thibault, CHU de Dijon, Dijon France
- ADAMS David, CHU, Le Kremlin-Bicêtre, France
- AL KHEDR Abdullatif, Hôpital Nord, Amiens, France
- ANNE Olivier, CH Saint Louis La Rochelle, La Rochelle, France
- AUDRY CHABOUD Dominique, Clinique Mutualiste Bénigne Joly, Talant, France
- BARROSO Bruno, CH François Mitterrand, Pau, France
- BILLY Christophe, CH d'Auxerre, Auxerre, France
- BRASSAT David, CHU Toulouse Purpan, Toulouse, France
- CAMU William, Hopital Gui De Chauliac, Montpellier, France
- CASEZ Olivier, CHU de Grenoble, Grenoble, France
- CASTELNOVO Giovanni, CHU de Montpellier-Nîmes, Nîmes, France
- CHAUPLANNAZ Guy, Clinique Charcot, Sainte Foy Les Lyon, France
- CLAVELOU Pierre, Hôpital Gabriel Montpied, Clermont-Ferrand, France
- COLAMARINO Renato, CH de Vichy, Vichy, France
- COLOMBIER Corine, Nouvelle Clinique de L'unior, Saint-Jean, France
- COMAN Irène, Hôpital Avicenne, Bobigny, France
- CORCIA Philippe, CHRU Bretonneau, Tours, France
- COUSTANS Marc, CH de Cornouaille, Quimper, France
- CREANGE Alain, Hôpital Henri Mondor, Créteil, France
- DE GRESLAN Thierry, Hôpital d'instruction des armées du Val-de-Grâce, Paris, France
- DE SEZE Jérôme, CH Hautepierre, Strasbourg, France
- DEREEPER Olivier, CH de Calais, Calais, France
- DEVOS Philippe, CH du Docteur Duchenne, Boulogne Sur Mer, France
- DEVY Richard, CH de Saumur, Saumur, France
- ELLIE Emmanuel, CH Côte Basque, Bayonne, France
- FAUCHEUX Jean-Marc, CH d'Agen, Agen, France
- FERRIBY Didier, CH de Tourcoing, Tourcoing, France
- GODET Etienne, CHR Metz - Hôpital ND-de-Bon-Secours, Metz, France
- GUILLOTON, Laurent, HIA Desgenettes, Lyon, France

- HEINZLEFF Olivier, Hôpital De Poissy Saint-Germain, Poissy, France
- HUTTIN Bernard, Hôpital Jean Monnet, Epinal, France
- KOPF Audrey, Clinique Sainte Odile, Haguenau, France
- LALU Thibault, CH de Béziers, Béziers, France
- LE BIEZ Pierre-Éric, CH Louis Pasteur, Cherbourg Octeville, France
- LEGOUT Alain, CH du Mans, Le Mans, France
- LEVASSEUR Michèle, CH d'Orsay, Orsay, France
- MAGY Laurent, CHU Dupuytren, Limoges, France
- MENAGE Pascal, Pole Sante Leonard De Vinci, Chambray Les Tours, France
- MEKIES Claude, Polyclinique Du Parc, Toulouse, France
- MILOR André-Michel, Clinique Du Colombier, Limoges, France
- NEAU Jean-Philippe, CHU de la Milétrie, Poitiers, France
- PASQUIE-MAGNETTO Valérie, Clinique Du Parc, Castelnau Le Lez, France
- POUliquen André, Clinique Mégival, St Aubin Sur Scie, France
- ROBIN Christophe, CH de Roanne, Roanne, France
- RUGGIERI Irène, Hôpital Saint Joseph, Marseille France
- SERVAN Jérôme, CH René Dubos, Pontoise, France
- SOISSON Thierry, Clinique de La Reine Blanche, Orléans, France
- SUCHET Laurent, CHP Beauregard, Marseille, France
- THILLIER Laurence, CHR Orléans, Orléans, France
- TOURBAH Ayman, Hôpital de La Maison Blanche, Reims, France
- TOURNIAIRE Patricia, CH Henri Duffaut, Avignon, France
- TREFOURET Sylvie, CHI Toulon - La Seyne-Sur-Mer, La Seyne Sur Mer, France
- VERNY Christophe, CHU d'Angers, Angers, France
- VIALLET François, CH Du Pays d'Aix, Aix en Provence, France
- VLAICU BUSTUCHINA Mihaela, Hôpital de la Pitié Salpêtrière, Paris, France
- VONGSOUTHIS Cyrille, Clinique du Millénaire, Montpellier, France
- ZAGNOLI Fabien, Hôpital d'Instruction des Armées Clermont Tonnerre, Brest, France
- ZIEGLER François, CH de Belfort, Belfort cedex, France