Journal of Anxiety Disorders 28 (2014) 741–746

Contents lists available at ScienceDirect

Journal of Anxiety Disorders

The relationships among separation anxiety disorder, adult attachment style and agoraphobia in patients with panic disorder

Stefano Pini[a,*], Marianna Abelli[a], Alfonso Troisi[c], Alberto Siracusano[c], Giovanni B. Cassano[a], Katherine M. Shear[b], David Baldwin[d]

[a] Department of Clinical and Experimental Medicine, Section of Psychiatry, University of Pisa, via Roma 65, I-56100 Pisa, Italy
[b] Columbia University, Department of Social Work, School of Social Work, Columbia University, New York, NY, USA
[c] Department of Neurosciences, University of Rome Tor Vergata, Via Montpellier 1, 00133 Rome, Italy
[d] Department of Psychiatry, University of Southampton, Faculty of Medicine, Academic Centre, College Keep, 4-12 Terminus Terrace, Southampton SO14 3DT, United Kingdom

ARTICLE INFO

Article history:
Received 19 May 2012
Received in revised form 20 June 2014
Accepted 30 June 2014
Available online 11 July 2014

Keywords:
Panic disorder
Separation anxiety disorder
Adult attachment style
Agoraphobia

ABSTRACT

Epidemiological studies indicate that separation anxiety disorder occurs more frequently in adults than children. It is unclear whether the presence of adult separation anxiety disorder (ASAD) is a manifestation of anxious attachment, or a form of agoraphobia, or a specific condition with clinically significant consequences. We conducted a study to examine these questions. A sample of 141 adult outpatients with panic disorder participated in the study. Participants completed standardized measures of separation anxiety, attachment style, agoraphobia, panic disorder severity and quality of life. Patients with ASAD (49.5% of our sample) had greater panic symptom severity and more impairment in quality of life than those without separation anxiety. We found a greater rate of symptoms suggestive of anxious attachment among panic patients with ASAD compared to those without ASAD. However, the relationship between ASAD and attachment style is not strong, and adult ASAD occurs in some patients who report secure attachment style. Similarly, there is little evidence for the idea that separation anxiety disorder is a form of agoraphobia. Factor analysis shows clear differentiation of agoraphobic and separation anxiety symptoms. Our data corroborate the notion that ASAD is a distinct condition associated with impairment in quality of life and needs to be better recognized and treated in patients with panic disorder.

1. Introduction

Separation anxiety disorder is a well-established diagnostic category in the psychiatric nomenclature (Shear, Jin, Ruscio, Walters, & Kessler, 2006). However, most studies of this condition pertain to childhood. By contrast, little attention has been paid to the occurrence of adult separation anxiety disorder (ASAD). Although in DSM-IV, separation anxiety disorder was classified in the section "Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence," criteria for the disorder are now described in the DSM-5 section on anxiety disorders (APA, 2013). The core features remain mostly unchanged, although the wording of the criteria has been modified to more adequately represent the expression of separation anxiety symptoms in adulthood. For example, attachment figures may include the children of adults with separation anxiety disorder, and avoidance behaviors may occur in the workplace as well as at school. Also, in contrast to DSM-IV, the diagnostic criteria no longer specify that age at onset must be before 18 years, because a substantial number of adults report onset of separation anxiety after age 18 (Marnane & Silove, 2013). The disturbance must cause clinically significant distress or impairment in social, academic, or other important areas of functioning. Adults with a diagnosis of ASAD report extreme anxiety about separations from major attachment figures (partner, children, or parents), fear that harm would befall those close to them and need to maintain proximity to them. These symptoms may affect the individual's behavior and lead to severe impairment in social relationships. It is important to distinguish between symptoms of ASAD and dependent personality traits. Dependency is a pervasive and indiscriminate tendency to rely excessively on others, whereas ASAD refers to a limited array of concern about the proximity and safety of key attachment figures.

Initially, Manicavasagar, Silove, and Curtis (1997) highlighted the clinical significance of ASAD as a distinct diagnosis. This group raised the possibility that the most common pathological outcome for children with separation anxiety may be adult separation

* Corresponding author at: Department of Psychiatry, University of Pisa, Via Roma 67, 56100 Pisa, Italy. Tel.: +39 050 993559; fax: +39 050 21581.
E-mail address: stefano.pini@med.unipi.it (S. Pini).

http://dx.doi.org/10.1016/j.janxdis.2014.06.010
0887-6185/

anxiety disorder (Manicavasagar, Silove, Curtis, & Wagner, 2000; Manicavasagar, Silove, & Hadzi-Pavlovic, 1998) and documented the occurrence of ASAD in adults (Wijeratne & Manicavasagar, 2003). Our group (Cyranowski et al., 2002; Fagiolini, Shear, Cassano, & Frank, 1998; Pini, Abelli, et al., 2005; Pini et al., 2010) also found ASAD to be surprisingly common in a large clinical population of outpatients with anxiety and mood disorders. The high prevalence of ASAD in the general population (6.6%) was also confirmed in the NCS-R data (Shear et al., 2006).

Another unresolved question is the nature of the relationship linking separation anxiety disorder to insecure attachment in general and to anxious attachment in particular (Troisi & D'Argenio, 2004). Theoretically, it is possible that not all individuals with anxious attachment meet criteria for separation anxiety disorder. It is also possible that separation anxiety disorder occurs even in the context of secure attachment. In other words, it is not known whether all individuals with separation anxiety disorder also engage in other anxious attachment behaviors. To our knowledge, no empirical study has been undertaken to answer this question.

Manicavasagar, Silove, Marnane, and Wagner (2009) tried to clarify the link between attachment styles and panic disorder/agoraphobia (PD-Ag). They studied 83 patients with PD-Ag and ASAD, highlighting that the style of anxious attachment, using the Attachment Style Questionnaire (ASQ) (Feeney, Noller, & Hanrahan, 1994), was more prevalent in patients with separation anxiety and panic disorder than in patients with only panic attacks.

Similarly, the relationship between adult separation anxiety disorder, panic disorder (PD) and agoraphobia has not been well clarified (Mian, Godoy, Briggs-Gowan, & Carter, 2012; Wittchen et al., 2008; Wittchen, Gloster, Beesdo-Baum, Fava, & Craske, 2010). A prominent theme in the literature pertains to the relationship between childhood separation anxiety and adult PD (Bruckl et al., 2007). Some investigators found evidence that childhood separation anxiety disorder is associated with an increased risk of PD, with or without agoraphobia, in adulthood (De Ruiter & Van Ijzendoorn, 1992; Klein, 1964, 1980). However, other studies have not supported this association (Aschenbrand, Kendall, Webb, Safford, & Flannery-Schroeder, 2003; Warner, Mufson, & Weissman, 1995). Lipsitz et al. (1994) found a high rate of childhood separation anxiety among adults with different anxiety disorders and questioned whether childhood separation anxiety disorder is selectively linked to adult PD or, alternatively, constitutes a risk factor for adult anxiety disorders more generally. Findings from the NCS-R supported the latter hypothesis. In the NCS-R, ASAD was highly comorbid with PD, but such a comorbidity rate was not different from the rates with other anxiety or mood disorders. Thus, neither childhood nor adult ASAD was preferentially associated with PD.

This hypothesis has been further corroborated by findings arguing against the notion that separation anxiety and anxious attachment are relevant to panic disorder with agoraphobia in general, suggesting instead that that constellation is confined to a separate group, namely that of adult separation anxiety disorder.

Preter and Klein (2008) proposed a model that amplified the original suffocation false alarm theory (Klein, 1993). The observation of respiratory abnormalities in patients with PD was in line with the hypothesis that panic may be provoked by indicators of potential suffocation, such as fluctuations in pCO_2 and brain lactate, as well as environmental circumstances. However, the fact that sudden loss, bereavement and childhood separation anxiety are also antecedents of "spontaneous" panic required an integrative explanation. Within this framework, the authors reappraised a developmental pathophysiological link between separation anxiety and PD and subsequent agoraphobia, coupled with attachment theory and ethological views of anxiety. Central opioid system dysfunction has been claimed to play a key role in both disordered breathing and separation distress in decreasing the suffocation alarm threshold.

Given the dearth of research concerning ASAD, we have undertaken a series of investigations to better understand this condition among help-seeking individuals diagnosed with other DSM IV diagnoses (Costa et al., 2009; Pini, Abelli, et al., 2005; Pini, Martini, et al., 2005; Pini et al., 2010). In the current paper, we report the results of a clinical study aimed at ascertaining whether adult separation anxiety can be distinguished from agoraphobia and from anxious attachment style. In addition, we aimed at clarifying whether the occurrence of ASAD is associated with distinctive features of the PD clinical picture. These data may contribute to the current debate whether ASAD is a distinct clinical entity or merely a variant/subtype of PD. In addition, differential assessment of ASAD, agoraphobia or anxious attachment style may have important therapeutical implications for patients with panic disorder (Milrod et al., 2014).

2. Methods

The study sample included 141 consecutive adult psychiatric outpatients with a diagnosis of panic disorder with or without agoraphobia as a primary diagnosis. Participants were recruited from the adult psychiatric outpatient clinics of the Department of Psychiatry, University of Pisa. Patients with psychotic disorders or substance use disorder prior to the index assessment were excluded. This investigation was carried out in accordance with the Declaration of Helsinki. The University of Pisa Ethical Committee reviewed the study design and all subjects were informed of the nature of study procedures and provided written informed consent prior to participation. Experienced residents in psychiatry performed interviews. Subjects completed self-report questionnaires and structured clinical interviews over 2 days.

2.1. Panic disorder diagnosis

All subjects were assessed with the Structured Clinical Interview for the DSM-IV (SCID-I) (First, Spitzer, Gibbon, & Williams, 2002) to establish DSM IV axis I primary diagnosis and comorbidity. We used the Panic Disorder Severity Scale (PDSS) to assess current severity of PD (Shear et al., 1997; Shear, Rucci, et al., 2001). We also examined current severity of depression using the Hamilton Depression Rating Scale (Hamilton, 1960). Quality of life was assessed by the Medical Outcomes Study Short Form (SF-36) (Ware & Gandek, 1998).

2.2. Separation anxiety

We conducted clinical interviews for adult and childhood history of separation anxiety disorder. To do this, we used the Structured Clinical Interview for Separation Anxiety Symptoms (SCI-SAS) (Cyranowski et al., 2002). This semi-structured interview evaluates each of the 8 DSM IV criterion symptoms of separation anxiety, separately for childhood and adult symptoms. Each question was scored as 0 (not at all), 1 (sometimes), 2 (often) or ? (don't recall). In keeping with the DSM-IV guidelines, endorsement of three or more of the eight criterion symptoms (symptoms rated as "2 (often)") was used as a threshold to determine categorical (yes/no) diagnosis of separation anxiety disorder in childhood and adulthood. In addition, criterion B (i.e., duration of at least 4 weeks) and C (i.e., the disturbance causes clinically significant distress or impairment in social, academic, occupational), or other important areas of functioning were required. Scores on the 8 items of each subscale were also summed to produce a continuous measure of separation anxiety symptoms (range for each subscale = 0–16).