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A discussion of various aspects of panic disorder depending on presence or absence of agoraphobia

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Abstract

Objective: The quality of life of individuals with panic disorder and agoraphobia can be improved by the alleviation of agoraphobia. In other words, examining panic disorder in terms of whether agoraphobia is present is crucial. The current study examined panic disorder from this perspective.
Methods: Subjects were 253 patients who met the diagnostic criteria for panic disorder (lifetime) according to the Mini International Neuropsychiatric Interview (MINI). Of those patients, 179 had agoraphobia and 74 did not. Statistical analysis was used to examine gender differences in the presence (or absence) of agoraphobia, comorbidities, and the effects of the presence of agoraphobia (severity, assessment of depression, assessment of anxiety, and personality) in these patients.
Results: Results indicated gender differences in the presence (or absence) of agoraphobia. Compared to patients without agoraphobia, significantly more patients with agoraphobia were female ($p < .001$), and had a higher prevalence of comorbidities. Patients with agoraphobia had a higher suicide risk ($p < .05$), more hypomanic episodes (current) ($p < .05$), and more frequent episodes of social phobia ($p < .05$). In addition, patients with agoraphobia had more severe panic disorder and a higher level of neuroticism, sensitivity to anxiety, and trait anxiety [PDSS-J, P&A, NEO-N: $p < .01$, ASI, STAI (Trait Anxiety): $p < .05$].
Conclusions: The current findings suggest that when treating a panic disorder, diagnosing the presence of agoraphobia is extremely important.

1. Introduction

Over the past few years, panic disorder has garnered attention in Japan and elsewhere. According to a review report by Kojima and Shioiri [1], the prevalence of panic disorder ranged from approximately 1.5 to 3.5%, with the rate for females being 2–3 times higher than for males. The report [1] also showed that the susceptible age for onset was the early 20s to early 30s; in particular, the early 20s was a common age for onset in males, and the early 30s for females. Kessler et al. [2] found a clear association for panic–depression comorbidity. Numerous studies have described the condition in neurobiology [3–7], pathophysiology [6,8,9] and functional imaging [9–11]; in addition, numerous studies have described approaches to treatment [12–17]. Medical professionals are aware that drug therapy and cognitive–behavioral therapy are crucial to treating panic disorder [12–15]. Carpiniello et al. [18] reported that patients with panic disorder had a considerably higher chance of improvement and remission than patients with panic disorder with agoraphobia. Van Apeldoorn et al. [19] showed that it was possible to treat panic disorder in patients without or with mild agoraphobia with selective serotonin reuptake inhibitor (SSRI) only, but that in patients with panic disorder and moderate or severe agoraphobia, cognitive behavioral therapy (CBT) was recommended in addition (CBT + SSRI). Another study [20] indicated that the group with panic disorder that received psychodynamic psychotherapy treatment had significantly decreased severity of panic symptoms. Moreover, studies have reported that a combination of these therapies is one option for the treatment of panic disorder [16,17]. One study reported that panic disorder could worsen as a result of agoraphobia [21]. Even

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if panic attacks cease completely, somewhat prolonged anticipatory anxiety can persist, and while anticipatory anxiety persists, agoraphobia has little chance of disappearing completely. If agoraphobia is present with panic disorder, alleviating agoraphobia can gradually improve a patient's quality of life (QOL) according to one study [16]. Kessler et al. [22] showed that 'panic disorder with agoraphobia group' had the highest odds of comorbidities among other lifetime *DSM-IV* disorders including 'only panic attacks group', 'panic attacks with agoraphobia group', 'only panic disorder group', and 'panic disorder with agoraphobia group'. Grant et al. [23] indicated that panic disorder with agoraphobia might possibly be a more severe variant of panic disorder. One report advised clinicians should be paid attention to panic disorder with agoraphobia vs. panic disorder without agoraphobia to carry out appropriate and effective treatments [24]. Examining panic disorder in terms of whether agoraphobia is present is vital in that it facilitates appropriate diagnosis and treatment.

The current study examined whether agoraphobia was present in patients with panic disorder.

2. Methods

In this study, subjects were 253 patients with panic disorder seen at the Warakukai Incorporated Medical Institution Nagoya Mental Clinic. These patients were deemed to have a panic disorder (lifetime) in accordance with an interview based on the criteria of the *DSM-IV-TR*, i.e., the Mini International Neuropsychiatric Interview (MINI). Of these 253 patients, 179 had agoraphobia, while 74 did not. The purposes and methods of this study and the fact that personal information would be protected were explained to subjects. All subjects signed a written informed consent to participate in the study. This study was approved by the Ethical Committee of the Mie University School of Medicine and the Warakukai Nagoya Mental Clinic.

This was a retrospective study. We recruited participants for this study at Warakukai Nagoya Mental Clinic from August 2005 to February 2007. This clinic is one of Japan's specialized outpatient clinics for anxiety disorders, so the patients included in this study had relatively high severity anxiety disorder. In addition, the group was in the average IQ range, and mean age was in the range most susceptible for panic disorder (Table 3).

This study used statistical analysis to examine gender differences in the presence (or absence) of agoraphobia, comorbidities, and the effects of the presence of agoraphobia in patients. Comorbidities were other applicable disorder modules of the MINI. The effects of the presence of agoraphobia were determined based on the severity of panic disorder (Panic Disorder Severity Scale–Japanese [PDSS-J], the Panic and Agoraphobia Scale [P&A]), assessment of depression (Self-rating Depression Scale [SDS]), assessment of anxiety (Anxiety Sensitivity Index [ASI] and the State–Trait Anxiety Inventory [STAI]), and personality (Revised NEO Personality Inventory [NEO-PI-R]). Statistical analyses in the present study were performed with chi-square test and t-test using SPSS 11.0 J (SPSS Inc., Tokyo, Japan).

3. Results

3.1. Gender differences in the presence (or absence) of agoraphobia in panic disorder (lifetime)

Details on gender differences are shown in Table 1. Compared to patients without agoraphobia, significantly more of the patients with agoraphobia were female ($p < .001$).

3.2. Comorbidities of agoraphobia in panic disorder (lifetime)

Comorbidities are shown in Table 2. No significant differences were noted between patients with and without agoraphobia in terms of age at the time of the study and age at onset. However, patients with agoraphobia had a higher suicide risk ($p < .05$), more frequent hypomanic episodes (current) ($p < .05$), and more frequent episodes of social phobia ($p < .05$).

3.3. Effects of the presence of agoraphobia in panic disorder (lifetime)

Details on the effects of agoraphobia are shown in Table 3. In the comparison of panic disorder (lifetime) patients with or without agoraphobia, there was no significant difference in age ($p > .05$), age at onset ($p > .05$), or IQ ($p > .05$). Compared to patients without agoraphobia, those with this disorder had a more severe panic disorder (PDSS-J: $p < .001$ and P&A: $p < .001$) and a higher level of sensitivity to anxiety (ASI: $p < .05$), trait anxiety (STAI: $p < .05$), and neuroticism (NEO-N: $p < .01$). In comparing panic disorder patients with or without agoraphobia, there was no significant difference in depression (SDS: $p > .05$), state anxiety (STAI: $p > .05$), extraversion (NEO-E: $p > .05$), openness (NEO-O: $p > .05$), agreeableness (NEO-A: $p > .05$), or conscientiousness (NEO-C: $p > .05$).

4. Discussion

Findings suggested that comorbidities, severity, sensitivity to and predisposition towards anxiety, and personality traits differed depending on whether agoraphobia was present.

Table 1
Gender differences in the presence (or absence) of agoraphobia in panic disorder (lifetime).

Agoraphobia	Male	Female
Without	34	40
With	42	137

$p < .001$.