ORIGINAL ARTICLE

# Early-onset social anxiety disorder in adults: Clinical and therapeutic features

# Transtorno de ansiedade social de início precoce em adultos: características clínicas e terapêuticas

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Versão original aceita em Português

#### Abstract

**Objective:** To investigate possible differences in clinical and treatment response in patients suffering from early-onset (< 18 years) and late-onset (≥18 years) social anxiety disorder. **Methods:** Patients diagnosed with social anxiety disorder of early-onset (n = 47; 75.8%) were compared to those diagnosed with late-onset social anxiety disorder (n = 15; 24.2%) in terms of age, mode of onset, subtype, psychiatric comorbidities (according to the Structured Clinical Interview for DSM-IV), symptom severity and response (assessed according to the Clinical Global Impression scale) after at least ten weeks of drug treatment. The statistical analyses included  $\chi^2$  tests with Yates correction or Fisher's exact test, as well as Student's t-test or Mann-Whitney test. The level of statistic significance adopted was 5%. Results: Patients presenting early-onset phobic symptoms more frequently: were inactive ( $\gamma^2 = 4.28$ ; df = 1; p = 0.04); suffered from the generalized subtype of social phobia ( $\chi^2 = 6.53$ ; df = 1; p = 0.01); and presented psychiatric comorbidity ( $\chi^2 = 6.71$ ; df = 1; p = 0.01). No differences were observed between the groups in severity of symptoms and therapeutic response. Conclusion: The findings suggest the existence of a possible social anxiety disorder subtype characterized by early onset of symptoms, higher rates of absenteeism, a wider range of social phobia symptoms and psychiatric complications.

Keywords: Anxiety disorders; Phobic disorders; Age of onset; Absenteeism

#### Resumo

Objetivo: Investigar a existência de possíveis diferenças clínicas e terapêuticas entre pacientes com transtorno de ansiedade social (TAS) de início precoce (< 18 anos) e início tardio (≥18 anos). **Métodos:** Quarenta e sete pacientes com diagnóstico de transtorno de ansiedade social de início precoce (75,8%) e 15 de início tardio (24,2%) foram comparados quanto a: idade, modo de início, subtipo, presenca de comorbidades psiquiátricas (avaliada através da entrevista clínica semi-estruturada para o diagnóstico da DSM-IV - SCID), gravidade dos sintomas e resposta após um mínimo de 10 semanas de tratamento farmacológico (avaliados pela Impressão Clínica Global - CGI). Os testes estatísticos utilizados foram os testes do  $\chi^2$  com correção de Yates ou exato de Fisher e os testes t de Student ou de Mann-Whitney. O nível de significância estatística utilizada foi de 5%. Resultados: Os pacientes com início precoce dos sintomas fóbico sociais foram mais freqüentemente inativos ( $\chi^2 = 4.28$ ; gl = 1; p = 0.04), tiveram mais freqüentemente o subtipo generalizado de fobia social ( $\chi^2 = 6.53$ ; gl = 1; p = 0,01) e apresentaram com maior freqüência comorbidade psiquiátrica ( $\chi^2$  = 6,71; gl = 1; p = 0,01). Não foi observada diferenca em relação à gravidade dos sintomas e à resposta terapêutica entre os dois grupos. **Conclusão:** Os achados sugerem a existência de um provável subtipo de transtorno de ansiedade social de início precoce, com maiores taxas de absenteísmo, maior amplitude dos sintomas fóbicos e mais complicações psiquiátricas.

Descritores: Transtornos de ansiedade; Transtornos fóbicos; Idade de início; Absenteísmo

Financing and conflict of interest: non-existent Submitted: 04 June 2004 Accepted: 30 August 2004

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### Introduction

Patients presenting with early onset of anxiety symptoms have been a target of interest in recent years. It has been suggested, for example, that the clinical forms of early-onset anxiety disorder are characterized by socio-demographic, clinical and prognostic aspects that are different from those of their late-onset counterparts. In a study evaluating patients with early-onset panic disorder (less than 18 years), Seguí et al found that these patients presented a higher frequency of comorbidity with other anxiety disorders (social and simple phobia), substance abuse, and family history of panic disorder.

In studies comparing patients with early- and late-onset obsessive-compulsive disorder (OCD),<sup>2-3</sup> it has been observed that the former group were more likely to belong to the male gender<sup>3</sup> and to present a higher number of different obsessions and compulsions, a greater severity of obsessive-compulsive symptoms,<sup>2,3</sup> and a higher resistance to serotonin reuptake inhibitors.<sup>2</sup> It has also been shown that such patients require a wider variety of drugs trials during treatment.<sup>3</sup>

The onset of social anxiety disorder is typically earlier than that of other anxiety disorders. Data from retrospective studies of adults presenting social phobia indicate that the onset of its symptoms commonly occurs in adolescence or in childhood. Social anxiety disorder is also frequently related to psychiatric comorbidities and a history of anxiety disorders in childhood.

Lecrubier and Weiller, <sup>12-13</sup> found that the types of psychiatric comorbidities of adults with early-onset social anxiety disorder (i.e. onset before age 15 years-old) were significantly different from those of adults with late-onset forms of this disorder. The first group presented comorbidity with alcohol abuse/dependence and major depression more frequently than the second one. On the other hand, Otto et al<sup>14</sup> found that the age of onset of social phobia was significantly lower in patients with a history of other anxiety disorders in childhood (e.g. avoidant personality disorder, separation anxiety disorder and agoraphobia). Finally, in studies of both epidemiological<sup>15</sup> and clinical samples, <sup>16</sup> symptom onset was found to occur earlier in patients with the generalized rather than in those with the circumscribed subtype of social anxiety disorder.

In an attempt to expand and replicate some of the findings previously described, our study aimed to identify the possible differences between patients with early- and late-onset social anxiety disorder in terms of sociodemographic, clinical and therapeutic characteristics.

# Methods

### 1. Patients

Sixty-two patients with social anxiety disorder were evaluated. All individuals fulfilled the DSM-IV criteria<sup>17</sup> for social anxiety disorder and spontaneously sought treatment at the Anxiety and Depression Program of the Institute of Psychiatry of the Federal University of Rio de Janeiro. Consecutive patients were assessed for the following inclusion criteria: 1) diagnosis of social anxiety disorder with or without psychiatric comorbidity (patients presenting comorbidity were only included if the social anxiety disorder was the first to occur or was responsible for the more severe clinical profile); 2) age between 18 and 65 years; and 3) absence of neurological illnesses.

## 2. Procedures

All patients had the following clinical variables assessed (prospectively and retrospectively): age at onset of social phobic

symptoms; mode of onset (sudden or insidious); subtype according to the DSM-IV criteria (circumscribed or generalized);<sup>17</sup> severity of symptoms [as evaluated using the Clinical Global Impression (CGI) scale]; and type of psychiatric comorbidity according to the Structured Clinical Interview for DSM-IV (SCID).<sup>18</sup>

We chose to employ the cut-off age of 18 years-old in order to distinguish between early-onset and late-onset social anxiety disorder in an attempt to create two groups that would be more homogeneous, i.e. patients in whom the disorder appeared during childhood or adolescence (before the age of 18) and patients in whom it appeared during adult life (after or at the age of 18). The age at onset of social anxiety disorder was defined as the age at which the individual began to present clinically significant social phobic symptoms.

After the initial evaluation, subjects were treated in an open fashion with different antidepressants (selective serotonin reuptake inhibitors or tricyclics) and/or benzodiazepines for a period of at least 10 weeks. Doses used were adjusted according to therapeutic response and tolerance to adverse effects. At the end of the treatment period, patients were revaluated with the CGI. Those individuals with a final CGI score of 1 (much better) or 2 (better) were considered treatment-responders.

In the statistical analysis, the  $\chi^2$  tests with Yates correction or Fisher's exact test were used in order to compare categorical variables among the different groups. Either the Student's t-test (paired and unpaired) or the Mann-Whitney test were employed in order to compare continuous variables. The adopted level of statistical significance was 5%.

#### Results

Of the 62 patients evaluated, 41 (66%) were male. Fifty-two (85%) were white, 8 (13%) were of mixed race and 1 (2%) was black. The patient's age at the time of the initial evaluation ranged from 19 to 57 years-old (mean, 38.61  $\pm$  10.6). Twenty-eight (45%) of the patients were married, 28 (45%) were single and 6 (10%) were divorced.

Ten individuals (16%) had completed elementary school, 26 (42%) had completed high school, and 26 (42%) had attended university. The majority (61%) of the sample was composed of economically productive individuals.

Regarding the clinical variables studied, 47 patients (75.8%) presented early onset of phobic symptoms, whereas 15 (24.2%) presented late onset. Symptom onset was insidious in most patients (91.9%). Patients with the generalized subtype according to DSM-IV criteria<sup>17</sup> were also represented in the greater part (90.3%) of the sample.

The average duration of treatment was  $4.15 \pm 3.60$  years. Six (9.7%) patients were treated with tricyclic antidepressants, 17 (27.4%) with serotonin selective reuptake inhibitors, 15 (24.2%) with benzodiazepine, and 24 (38.7%) with the combination of a benzodiazepine and an antidepressant. The mean initial CGI score was  $5.15 \pm 0.74$ , and the mean final CGI score was  $2.61 \pm 1.46$ . At the end of the treatment, 54.8% of the patients were considered responders (CGI  $\leq$  2).

We found that 82.3% of the sample exhibited some type of psychiatric comorbidity: 50% presented a single comorbidity, 21% presented two and 11.3% presented three. Major depression and alcohol abuse were the most common disorders (frequency of 41.9% and 19.4%, respectively). Panic disorder was identified in 9.7% of the sample, the same frequency as that of simple phobia. In addition, 6.5% of the patients were diagnosed with obsessive-compulsive disorder, 4.8% with

Table 1 – Comparison of the sociodemographic characteristics of patients with early- and late-onset social anxiety disorder

Varible	Early onset n = 47 (75.8%)	Late onset n = 15 (24.2%)	P
Age, years	37.61 ± 10.85	42.25 ± 9.49	0.54
Sex			0.19
Male	29 (61.7%)	12 (80%)	
Female	18 (38.3%)	3 (20%)	
Race			0.19
White	41 (89.1%)	11 (73.3%)	
Mixed race	4 (8.7%)	4 (26.7%)	
Black	1 (2.2%)	0 (0%)	
Marital status			0.41
Single	23 (48.9%)	5 (33.3%)	
Married	19 (40.4%)	9 (60%)	
Divorced	5 (10.7%)	1 (6.7%)	
Education			0.19
Elementary	7 (14.9%)	3 (20%)	
Secundary	24 (51.1%)	2 (13.3%)	
Universitary	16 (34%)	10 (66.7%)	
Economic activity			0.04*
Productive	24 (52.2%)	13 (86.7%)	
Not productive	22 (47.8%)	2 (13.3%)	

<sup>\*</sup> p<0.05

generalized anxiety disorder, 4.8% with body dimorphic disorder, 3.2% with agoraphobia, 1.6% with post-traumatic stress disorder, and 1.6% with trichotillomania.

Patients with early- and late-onset social anxiety disorder were compared and contrasted regarding sociodemographic, clinical and prognostic characteristics. Patients with early-onset social anxiety disorder presented higher rates of absenteeism ( $\chi^2=4.28;$  df =1; p =0.04), they were characterized as not being economically productive. These patients also presented a higher frequency of the generalized subtype of social phobia ( $\chi^2=6.53;$  df =1; p =0.01), and, within this group, there were more patients presenting one or more psychiatric comorbidities ( $\chi^2=6.71;$  df =1; p =0.01) (see Tables 1 and 2). No statistically significant difference was found between the final CGI scores of patients with early- and late-onset of symptoms.

# Discussion

Clinical and sociodemographic characteristics of a sample of 62 adult patients diagnosed with social anxiety disorder were evaluated in the present study. The ultimate objective of our analysis was the identification of differences between the subgroups presenting early- and late-onset forms of the disorder. Our preliminary findings suggest that the early-onset form of social anxiety disorder may be a putative clinical subtype characterized by higher rates of absenteeism, a wider range of phobic symptoms and additional psychiatric complications.

As in most other studies, 4,14-15 our sample was composed primarily of members of the subgroup that had experienced symptom onset prior to the age of 18. Fewer patients in this group were economically productive, suggesting greater impairment of social function. In an epidemiological study, Wells et al<sup>19</sup> found that early-onset social anxiety disorder was associated with lower levels of education and marriage. In a clinical study, Lecrubier<sup>13</sup> found that patients with early-onset social anxiety disorder (< 15 years) had lower levels of education (an average of 2.8 years) than those from the late-onset group. These results are similar to those obtained by Ballenger et al,<sup>20</sup> who suggested that the earlier the onset of social anxiety disorder, the greater the impairment of interpersonal relationships and social advancement (professional and academic).

We found that the generalized subtype of social anxiety disorder was more common in early-onset group. Similarly, in studies conducted by Wittchen<sup>15</sup> and Manuzza,<sup>16</sup> both comparing patients with generalized social anxiety disorder to those with the circumscribed form, a significant correlation was found between early age at onset and the generalized subtype. These findings suggest that early onset is associated with a form of social anxiety disorder that is broader in scope and therefore imposes more limits on the patient, resulting in greater functional interference in this subgroup of patients.

In the present study, the occurrence of one or more psychiatric comorbidities was higher among patients with earlyonset social anxiety disorder. However, the frequencies of

Table 2 - Comparison between clinic and therapeutic characteristics of patients with early- and late-onset social anxiety disorder

Variable	Early onset n = 47 (75.8%)	Late onset n = 15 (24.2%)	Р
Mode of onset			0.7
Sudden	3 (6.4%)	2 (13.3%)	
Insidious	44 (93.6%)	13 (867%)	
Subtype			0.01**
Circunscribed	2 (4.3%)	4 (26.7%)	
Generalized	45 (95.7%)	11 (73.3%)	
N° of comorbidities			0.06
None	5 (10.6%)	6 (40%)	
One	27 (57.4%)	4 ( 26.7%)	
Two	9 (19.2%)	4 (26.7%)	
Three	6 (12.8%)	1 (6.6%)	
Comorbidities			0.01**
Present	42 (89.4%)	9 (60%)	
Absent	5 (10.6%)	6 (40%)	
Inicial CGI *	5.15 ± 0.75	5.12 ± 0.74	0.94
Final CGI	2.77 ± 1.32	2.13 ± 1.19	0.17
Evolutive CGI	2.13 ± 0.99	1.87 ± 0.92	0.37

NOTE: \* CGI: Clinical Global Impression, \*\* p < 0.05

several anxiety and mood disorders, when evaluated separately, were similar in both groups. In the results described by Lecrubier, 12-13 a higher prevalence of depression and alcohol abuse/dependence was identified in patients with early-onset social anxiety disorder. That study differed from ours in that the author adopted a cut-off point of the age of 15 to define early-onset. This may explain the different findings between the results.

The occurrence of higher rates of psychiatric comorbidity in individuals presenting early onset of symptoms is usually seen in patients with several mood and anxiety disorders, such as dysthymia, 21 major depression 22-23 and panic disorder 1 The onset of social phobic symptoms, however, usually precedes those of comorbid anxiety and mood disorder 24 and is considered by some authors to be a risk factor for the development of these comorbidities. Such observations suggest that early therapeutic interventions could be useful in the prevention of the development of these comorbidities, which would be complications of the initial symptoms. 4,12-13

No significant difference in terms of symptom severity was found between early- and late-onset social anxiety disorder, i.e. statistical significance was not attained when initial mean CGI scores were compared between these two groups. Similarly, Reich et al<sup>25</sup> did not identify early onset of the symptoms (< 16 years) as a possible predictor of treatment response.

Our study has some limitations and should be considered preliminary. Firstly, our sample, especially the late-onset group, was relatively small and composed of individuals who sought treatment spontaneously at a specific research center. This probably distinguishes them from the general local and national population of individuals suffering from social anxiety disorder. Secondly, although we have made a number of comparisons, which could constitute a limitation, our results are similar to those obtained in studies conducted at other facilities. Finally, a several different drugs and doses were employed, resulting in a small number of patients under each type of treatment and thus limiting our conclusions regarding therapeutic response (i.e. the study included a naturalistic follow-up).

## Conclusion

In summary, we found lower rates of economic productivity, more psychiatric complications and a wider range of symptoms in the group of patients presenting early-onset social anxiety disorder. These findings suggest that, within the diagnostic category of social anxiety disorder, there is a subgroup of patients with a precocious presentation of anxiety symptoms presenting different clinical, but not prognostic, characteristics.

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