Relationship between adult social phobia and childhood anxiety

Relação entre fobia social na vida adulta e ansiedade na infância

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Abstract **Objective:** The aim of this study was to evaluate the prevalence of traumas and the presence of childhood anxiety disorders in adult patients with social phobia and investigate their influence on the presentation of the disorder.
Methods: Twenty-four adult patients with social phobia were asked about the presence of trauma before the age of 16. The K-SADS-E and the DICA-P interviews were used to assess these patients regarding childhood anxiety disorders.
Results: Twelve (50%) patients reported a history of trauma before the age of 16. The presence of trauma did not influence the presentation of the disorder. Seventy-five percent of patients had a history of anxiety disorders in childhood. Patients with a history of at least 2 childhood anxiety disorders had an increased lifetime prevalence of major depression (10 vs. 3; p=.04) and family history of psychiatric disorders (13 vs. 6; p=.02).
Conclusion: Anxiety disorder in childhood is associated with family history of psychiatric disorders. The presence of more than one diagnosis of anxiety disorder in childhood can be considered a risk factor for the development of depression in adult patients with social phobia.

Keywords Social phobia. Childhood anxiety. Trauma. Comorbidity. Depression.

Resumo **Objetivo:** A meta desse estudo foi avaliar a prevalência de traumas e a presença de transtornos de ansiedade na infância em pacientes adultos com fobia social e investigar sua influência na apresentação do transtorno.
Métodos: Vinte e quatro pacientes adultos com fobia social foram questionados sobre a presença de trauma antes dos 16 anos. A presença de transtornos de ansiedade na infância foi avaliada por meio do K-SADS-E e DICA-P.
Resultados: Doze (50%) pacientes relataram história de trauma antes dos 16 anos. A presença de trauma não influenciou a apresentação do transtorno de ansiedade social. Três quartos dos pacientes apresentavam história de transtorno de ansiedade na infância. Pacientes com história de dois ou mais transtornos de ansiedade na infância tinham uma prevalência aumentada de depressão maior na vida (10 vs. 3; p=0.04) e de história familiar de doença psiquiátrica (13 vs. 6; p=0.02).
Conclusão: Transtorno de ansiedade na infância está associado com história familiar de doenças psiquiátricas. A presença de mais de um diagnóstico de transtorno de ansiedade na infância pode ser considerada um fator de risco para o desenvolvimento de depressão em pacientes adultos com fobia social.

Descritores Fobia social. Ansiedade na infância. Trauma. Comorbidade. Depressão.

Introduction

Social phobia is characterized by the fear of being scrutinized by other people in social or performing situations and of being evaluated negatively by them. Lifetime prevalence of 13.3% makes social phobia the third most common psychiatric disorder, after major depression and alcohol dependence.[1] In general medical practice social phobia is seldom a primary reason for seeking treatment. On the contrary, the development of comorbid psychiatric conditions such as depression, panic or substance abuse eventually instigates help-seeking.

The etiology of social phobia is uncertain but several lines of inquiry posit the importance of familial, genetic and neurobiologic factors.[2] Traumas and childhood difficulties have been implicated in the genesis of social phobia.[3,4] Recent studies reported that anxious patients had significantly higher rates of physical and sexual abuse, including patients

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with social phobia, compared to non-anxious controls.[4]

Early anxiety difficulties may also be linked to the development of social phobia. Investigations suggest a link between the presence of behavioral inhibition and anxiety disorders in childhood with social phobia and panic disorder in adult patients.[5-7] Behavioral inhibition may represent the first manifestation of a lifelong predisposition to anxiety, which later develop into social phobia, or other anxiety disorder.[5]

Lipsitz et al[6] retrospectively evaluated the presence of separation anxiety disorder in patients with social phobia, panic disorder and obsessive-compulsive disorder and showed that the presence of separation anxiety in childhood was associated with a higher number of anxiety disorders in adult life. Although there seems to be an association between childhood trauma and anxiety disorders in childhood with social phobia, the clinical implications of this link are not well established.

The aim of this study was to evaluate the prevalence of childhood trauma, childhood anxiety disorders in adult patients with social phobia and to investigate their relationship to severity and patterns of comorbidity in affected patients.

Methods

Subjects were all patients with the diagnosis of social phobia receiving treatment in the Anxiety Disorder Program at the Clinical Hospital of Porto Alegre during a six-month period. Patients were eligible for the study if aged 18 to 65 years and met DSM-IV criteria for a primary diagnosis of social phobia. Patients entered the study at different points in the course of their illness.

Procedure

The study protocol was approved by the subcommittee on Human Studies of the Clinical Hospital of Porto Alegre. After giving written informed consent, the Mini International Neuropsychiatric Interview (MINI)[8] was administered to all patients to establish diagnoses, including comorbid anxiety, affective and substance use disorders, by a psychiatrist who did not participate in the evaluation of the presence of trauma, family and childhood history of anxiety disorders.

Trauma before the age of 16 was evaluated by direct query regarding the occurrence of physical or sexual abuse and the occurrence of parental death, divorce or separation. Family history was assessed by a semi-structured interview (family history of psychiatric disorder, use of psychiatric medications, alcohol abuse and hospital admissions). Childhood anxiety disorders were assessed by structured interviews including the K-SADS-E and the DICA-P in which patients were questioned regarding their childhood. The K-SADS-E was used to assess childhood agoraphobia, generalized anxiety disorder, separation anxiety disorder and childhood social phobia. The DICA-P evaluated avoidant disorder. Baseline Hamilton Anxiety Scale was applied in 20 out of the 24 patients of the sample.

Statistical analysis was performed using Epi-Info 6.0 Program. Chi-square test, chi-square test with Yates correction when necessary and t test were used and the results were considered significant at the $p<0.05$ level.

Results

The studied population comprised 24 patients, 45.8% (n=11) men and 54.1% (n=13) women. The mean age of the sample was 35.1±14.2 years (mean ± standard deviation). The mean age of onset of social phobia was 16.9±9.6 years and the duration of the disorder was 18.2±13.9 years. A family history of any psychiatric disorder was found in 79.1% (n=19) of patients, with a family history of social phobia in 41.6% (n=10) of our sample.

Seventy-five percent of patients had at least one other psychiatric condition, being past or present major depression the most common comorbidity (54.1%). The other comorbidities were panic disorder (12.5%), obsessive-compulsive disorder (8.3%), substance abuse/alcoholism (8.1%), generalized anxiety disorder (4.1%) and bipolar disorder (4.1%).

History of childhood anxiety disorders was reported by

Table 1 - Prevalence of anxiety disorders history in childhood.

	N	%
Separation anxiety	10	41.7
Generalized anxiety disorder	12	50.0
Avoidant disorder	9	37.5
Agoraphobia	3	12.5
Social phobia	12	50.0
Any disorder	18	75.0
Two or more disorders	13	54.1

Table 2 - Clinical features of patients with and without two or more anxiety disorders in childhood.

	With two or more anxious disorders in childhood (n=13)	Without two or more anxious disorders in childhood (n=11)	
Age	30.6±10.9	40.4±16.2	.08**
Gender			
Females	5 (38.4%)	6 (54.5%)	.70*
Males	8 (61.6%)	5 (45.5%)	
Hamilton Scale	30.6±5.8	26.4±5.8	.12**
Depression comorbidity	10 (76.9%)	3 (27.3%)	**.043***
Anxiety comorbidity	3 (23.0%)	2 (18.1%)	.83*
Onset of social phobia (years)	16.8±12.1	17.0±6.1	.95**
Family history of psychiatric disorder	13 (100%)	6 (54.5%)	**.02***
Family history of social phobia	5 (38.5%)	5 (45.5%)	.94*
Trauma	6 (46.2%)	6 (54.5%)	1.0*

**chi-square test with Yates correction.*
***Fisher's Exact Test.*
***Bold** represents P<.05.*

18 patients (75%). Thirteen (54.1%) had at least two childhood anxiety disorders. The most frequent disorders described were social phobia (50%) and generalized anxiety disorder (50%) (Table 1).

Given the small sample size we examined the association between childhood anxiety disorders and current disorders by examining patients with or without childhood anxiety. There was no association between any anxiety disorder in childhood and depression (61.1% vs. 33.3%, p=.47, chi-square test with Yates correction) or any anxiety disorder and adult comorbidity (22.2% vs. 16.6%, p=.77, chi-square test with Yates correction). Using stricter criteria for anxiety disorder in childhood, i.e. the presence of at least two childhood anxiety disorders,[7,9,10] ten (76.9%) patients with these diagnoses had past or present major depression compared to only three (27.2%) patients with less than two childhood anxiety disorders (p=.043, chi-square test with Yates correction). One hundred percent of patients with two or more anxiety disorders during childhood had family history of psychiatric disorders compared to 54.5% of those without such a history (p=.01, chi-square test with Yates correction). Given their low frequency in this population we did not examine the relationship with substance abuse or bipolar disorder. Other clinical features are summarized in Table 2.

Half of the these adult patients with social phobia reported a history of trauma aging 16 years including divorce (n=3), parental death (n=3), physical abuse (n=5) and sexual abuse (N=3). There was a trend for patients with a history of childhood trauma to have a lifetime history of major depression (75% vs. 33.3%, p=0.1, chi-square test with Yates correction), but not of comorbid anxiety disorder. The presence of trauma did not influence the presentation of the disorder and it was not associated to childhood history of anxiety disorder or family history of psychiatric disorders.

Discussion

In this study, we found that a considerable number of patients with social phobia had a history of trauma before the age of 16. The rate of 50% reported here is consistent with those noted by other investigators.[6-11] Early stressful events, associated with a genetic vulnerability (as evidenced by a family history of anxiety disorders) could predispose to the development of phobic symptoms. Stressful events in childhood might also lead to neurobiological changes, particularly in the hypothalamus-pituitary-adrenal (HPA) axis, predisposing the development of anxiety and depressive disorders in adulthood. For instance, Heim et al,[11] reported that women with a history of child abuse had increased pituitary-adrenal and autonomic responses to stress compared to those without such a history - whether they suffered or not from current major depression. In our study, there was a trend for adult patients with a history of trauma before aging 16 years to have higher rates of comorbid depression compared to those without trauma history.

Our finding that 75% of adult social phobics had a history of childhood anxiety disorders agrees with studies examining this issue in panic patients and in social phobic patients.[7,10,12] In the present study, patients with a history of childhood anxiety disorders had significantly higher rates of comorbid depression in adult life. This result agrees with a longitudinal epidemiological study of adolescents and young adults that found that social phobia in nondepressed individuals was associated with an increased likelihood of depressive disorder onset during the follow-up.[13] Patients with comorbid social anxiety and depression are at highest risk not only for subsequent depression, but also for a more malignant course of the depressive illness, characterized by increased suicidal ideation and suicidal attempts, and more depressive symptoms during episodes.[2,7] These findings are consistent with the report by Alpert et al,[14] to whom depressive patients in which the first episode occurred by the age of 18 typically had at least one anxiety disorder as a comorbid disorder, social phobia and simple phobia being the most common. Anxiety in the form of social inhibition or social avoidance may precede or lead to major depression.[14]

Agreeing with previous reports,[15] the presence of childhood history of anxiety disorder was strongly associated with family history of psychiatric disorder. All the patients with two or more anxiety disorders in childhood had family history of psychiatric disorders consistent with the potential import of both early developmental and genetic influences.[9] Patients who express anxiety during childhood may have a stronger genetic loading for these disorders. Affected parents may also model anxious and phobic behaviors in their children or have difficulty in appropriately soothing their frightened offspring.

We did not find an association between the presence of childhood anxiety disorder and other comorbid anxiety disorder, substance abuse or alcoholism.

Limitations of this study should be acknowledged. Even though the Brazilian version of MINI (structured diagnostic interview) was used, this version has not been completely validated.[8] The relatively small sample size may have obscured potential associations. In addition, interpretation of the findings in this study is limited by the retrospective nature of the assessment of childhood psychopathology through indirect evaluation of familial psychopathology and the influences of this genetic loading on our findings. Prospective evaluation of these issues in a larger sample is necessary.

The association between childhood history of anxiety and social phobia suggests the potential importance of assessment and interventions with ‘at risk’ populations i.e., children with anxiety disorder and family history of psychiatric disorder. Attempts to foster the development of coping strategies for emerging stressful life events, and pharmacological and psychosocial interventions for symptomatic children may prevent the development or ameliorate the severity of anxiety disorder and depression in adult life. Prospective studies are underway to examine this hypothesis.

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