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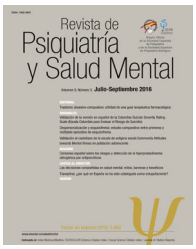

SCIENTIFIC LETTER

State anxiety and trait anxiety in patients with aortic pathology. Another therapeutic target?

Ansiedad estado y ansiedad rasgo en pacientes con patología aórtica. ¿Otra diana terapéutica?

Dear Editor:

Patients with cardiovascular pathology may undergo an anxiety state related to their disease. It has been demonstrated that after an acute coronary syndrome 30% of patients experience high anxiety levels, and that half of them will remain under this condition one year after.[1] According to Spielberger,[2] there are two kinds of anxieties: state anxiety (AS) and trait anxiety (AT). AS reflects a transitory emotional condition characterized by subjective and consciously perceived feelings of tension and apprehension, which may vary in intensity. In contrast, AT refers to a general tendency to respond with anxiety to perceived threats and is a relatively stable characteristic.

Little is known about the relation between anxiety, its different types and aortic disorders. We sought to evaluate anxiety levels in this setting and whether these are related exclusively to a trait or not. During six months we conducted a prospective inclusion of patients with thoracic aorta disease undergoing follow-up in a single outpatient Cardiology. Evaluation of the anxiety as a trait (AT) or state (AS) was performed through the STAI (State-Trait Anxiety Inventory) questionnaire. Each form has 20 items using four-point Likert-scales, with total scale scores ranging from 20 to 80 and being directly proportional to the anxiety level.[3] Progressive aortic disease was defined as an increase in any of the following conditions: aortic regurgitation grade, transaortic peak gradient, ascending aortic aneurysm (AAA) diameter and dissection or intramural haematoma size.

As a result, 21 patients were evaluated. Mean age was 65.4 ± 13 years. Basal characteristics are shown in Table 1 and aortic pathologies evaluated in Table 2.

Global mean scores were 57.2 ± 5.4 for AS and 56.1 ± 6.3 for AT, with no significant difference between them ($p = 0.3$). Patients diagnosed with AAA (58.6 vs 42.3, $p = 0.02$) and bicuspid aortic valve (59.5 vs 53.3, $p = 0.05$) showed significantly higher scores for AS, without differences in AT (57.7 vs 54.5, $p = 0.21$ and 59 vs 56.2, $p = 0.3$ respectively).

There was a trend towards a higher AS score in patients with progressive aortic disease compared with stable disease patients (60.2 vs 55.7, $p = 0.10$), with no significant difference in AT (57.7 vs 56.2, $p = 0.4$). All subjects obtained AS scores above the 90th centile compared with general population data.[4] Patients with thoracic aortic disease present quantitative data of anxiety evaluated through a standardized questionnaire, specially those with bicuspid aortic valve and AAA. Anxiety as a state, probably related to their pathology, is predominant. These findings have been demonstrated previously in other cardiovascular settings.[1] Although our study has the limitation of patients fulfilling the questionnaire the same day that they visit the outpatient clinic, we found fairly high scores which would be hardly explained exclusively to that fact. Even when not statistically significant, the greater anxiety manifested by patients with progressive aortic disease may reflect anticipative stress due to a probable future surgical intervention. From a therapeutic approach, rehabilitation programmes with and individualized approach (reminding ''the person-centre care'') for patients with previous aortic surgery and therapies to avoid and control anxiety should be considered.[5] Even, as previously suggested, the active search for biomarkers in anxiety states could be useful.[6]

Table 1 Basal characteristics.

Male	17 (80.95%)
Hypertension	16 (76.2%)
Dyslipidaemia	6 (28.6%)
Diabetes mellitus	5 (23.8%)
Chronic kidney disease	0 (0%)
Stroke	1 (4.8%)
Peripheric artery disease	1 (4.8%)
Coronary artery disease	5 (23.8%)
Myocardial infarction	3 (14.3%)
Atrial fibrillation	5 (23.8%)
Familiar history of aortic disease	4 (19%)
Oral anticoagulation	8 (38.1%)
Antiplathelet therapy	5 (23.8%)

Table 2 Aortic pathologies.

Aortic dissection or aortic intramural haematoma	2 (9.5%)
Ascending aortic aneurysm	6 (28.6%)
Bicuspid aortic valve	4 (19%)
Ascending aortic aneurysm + bicuspid aortic valve	2 (9.5%)
Ascending aortic graft replacement	5 (23.8%)
Ascending aortic graft + aortic valve replacement	2 (9.5%)
Progressive aortic disease	6 (28.6%)

Our study is still underway and whether these observations have any impact on hard clinical outcomes or not should be investigated with a great number of patients and with a long-term follow-up.

References

1. Grace SL, Abbey SE, Irvine J, Shnek ZM, Stewart DE. Prospective examination of anxiety persistence and its relationship to cardiac symptoms and recurrent cardiac events. Psychother Psychosom. 2004;73:344–52.
2. Spielberger CD. Theory and research on anxiety. In: Anxiety and behavior. New York: Academic Press; 1966.
3. Spielberger CD, Gorsuch RL, Lushene RE. STAI manual for the state-trait anxiety inventory. California: Consulting Psychologists Press; 1970.
4. Vera-Villarroel P, Celis-Atenas K, Córdova-Rubio N, Buela-Casal G, Spielberger CD. Preliminary analysis and normative data of the state-trait anxiety inventory (STAI) in adolescent and adults of Santiago, Chile. Terapia Psicol. 2007;25:155–62.
5. Ramos Pozón S. Person centered-care and recovery: could it be used for obtaining a humanized health care? Rev Psiquiatr Salud Ment. 2017;10:179–80.
6. Meana JJ, Mollinedo-Gajate I. Biomarkers in psychiatry: between myth and clinical reality. Rev Psiquiatr Salud Ment. 2017;10:183–4.

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Difficulties in delivery and depressive symptomatology in schizophrenia☆

Dificultades en el parto y sintomatología depresiva en la esquizofrenia

Schizophrenia is a complex disorder characterized by a wide range of symptomatology including positive (e.g. delusions, hallucinations) and negative (e.g. apathy, avolition) symptoms associated with increased medical morbidity and early mortality.[1] The current literature describes its origins as a gene plus environmental disorder, in which obstetric complications are a major risk factor.[2] However, obstetric complications are typically quantified as a homogeneous entity (i.e. a dichotomous variable regarding its presence or absence). Our previous study highlighted its heterogeneity,[3] suggesting that different patterns of obstetric complications were associated with different birth weights, an outcome with further cognitive[4] and metabolic implications.[5] In between those, difficulties in delivery have been correlated a higher prevalence of psychosis in the offspring[6] suggesting the activation of specific genes involved in neurovascular function or regulated by hypoxia.[7]

We aimed to evaluate if different patterns of obstetric complications are associated with a specific clinical pattern in stable patients diagnosed with schizophrenia.

Ninety-eight patients were included from a multi-center cross-sectional study of negative symptoms in schizophrenia. The Lewis-Murray scale was used to evaluate obstetric complications and stratified our sample into three subgroups as suggested by Cannon et al.[2] Two groups were characterized by complications during the gestational period, while the other group was characterized by difficulties in delivery (i.e. premature rupture of membranes or pre-labor rupture of membranes; duration of delivery over 36 h or below 3 h; prolapsed umbilical cord; complicated cesarean; abnormal fetal presentation; use of forceps; and incubation for over 4 weeks).

Patients were clinically evaluated with the Positive and Negative Syndrome Scale (PANSS), the Brief Negative Symptom Scale (BNSS) and the Calgary Depression Scale for Schizophrenia (CDSS). They were compared with non-paired Student's t-test, Mann-Whitney U Test or X^2 for comparison of proportions with SPSS v23.0.

All local research ethic committees approved the study.

Patients were either grouped into having difficulties in delivery (N = 26) or not (N = 72). We found no significant differences in general demographic and clinical variables (see Table 1). However, significant differences were found in three specific items from the general psychopathology subscale from the PANSS, with significant differences in anxiety: patients with difficulties in delivery (3.1; SD 1.2) and without (2.4; SD 1.0) (p=0.003); guilt feelings: mean in patients with difficulties (2.5; SD 1.4) and without (1.7; SD 1.1) (p=0.003), and unusual thought content: mean in the group with difficulties in delivery (2.3; SD 1.2) and without (1.7; SD 1.1) (p=0.003). We also found significant differences in two specific items from the CDSS: in guilty ideas of reference: mean in patients with difficulties (0.5; SD 0.7) and without (0.2; SD 0.4) (p=0.001), and in pathological guilt: mean in patients with difficulties in delivery (0.6; SD 0.8) and without (0.2; SD 0.4) (p=0.002).

As brain maturation is extremely sensitive to timing during gestation and perinatal period, we included gender as a potential confounding factor. A general linear model analysis was conducted with the significant items as dependent variables, with gender, and the presence of difficulties in delivery (dichotomous variable yes/no) as independent variables. When considering total general psychopathology from PANSS and specifically anxiety, guilt feelings and unusual thought content items, and the total CDSS symptomatology and specifically guilty ideas of reference and pathological guilt

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