

The Correlation Between Anxiety and Depression Levels and Functional Capacity in Pregnant Women with Cardiac Disease

Alona Winkler, Smadar Truman, Rafael Kuperstein, Michal Nir Simchin, Hana Kerzman
Heart Institute, Heart Center Sheba Medical Center, Israel

Purpose:

The study aimed to evaluate anxiety and depression levels in pregnant women with cardiac disease; and their relationship with NYHA functional capacity

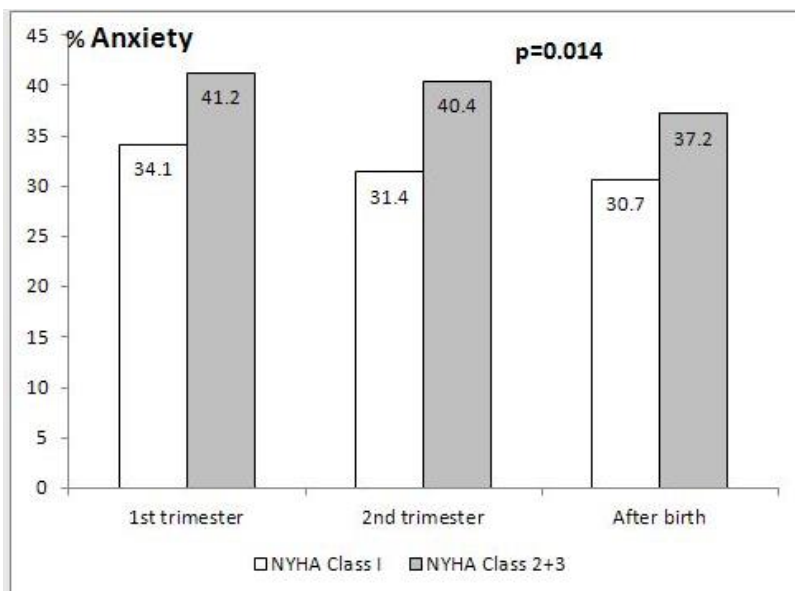
Methods:

A follow-up longitudinal study that included 47 pregnant women with cardiac disease treated in our Heart Center (from a total of 114) was conducted in 3 stages ; after 3 and 6 months of pregnancy and 1 month post delivery . A questionnaire containing personal and medical details, an anxiety questionnaire (Spielberger 1970) and a depression questionnaire (Beck 1961) were utilized. Forty-four of the 47 patients answered all three questionnaires successfully. Data were collected and analyzed using SPSS software.

Results:

During the 1st trimester 38 women were in NYHA I, 4 in NYHA II and one in NYHA III. In the 2nd trimester, 29 were NYHA I, 10 NYHA II and 3 NYHA III. After delivery, 39 were NYHA I, 3 NYHA II and 1 NYHA III. For the whole cohort average depression and anxiety levels remained low (≤ 40) throughout pregnancy and there was a significant correlation between functional capacity and anxiety level ($p < 0.05$). When compared to patients in NYHA class I, patients in NYHA class II-III showed more signs of depression and anxiety in all stages of pregnancy, $p = 0.014$ (Fig.1) .

Fig 1.



Conclusion:

There is a significant correlation between functional capacity, anxiety and depression levels during pregnancy and post- delivery in women with cardiac disease. Clinical deterioration is associated with an increase in depression and anxiety levels.