

importance of this biomarker in therapeutic decision-making and prognostic tool in patients with mCRPC. Further studies with bigger samples will be necessary to determine its clinical applicability.

57ASM – 137 | Role of BNP and NT-proBNP for early diagnosis of cardiac pathologies in pregnancy

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Introduction and Background: Brain natriuretic peptide (BNP) and N-terminal pro-brain natriuretic peptide considered one of the biomarkers for the early diagnosis of cardiac pathologies. Role of these biomarkers in pregnancy with cardiac pathologies have not been fully studied. Aim of the study was to evaluate the possible prognostic value of BNP and NT-proBNP for the early diagnosis of cardiac pathologies in pregnancy.

Material and Methods: 118 pregnant women with cardiac pathologies and 32 pregnant women without any cardiac pathologies (control group) have been enrolled in the study (I and II trimester). Among group I pregnant women 32 had arrhythmias, 26 had myocarditis and 60 had hypertension. Baseline anthropometric, clinical and laboratory data along with assessing the BNP and NT-proBNP were performed. All statistical analysis were conducted using SPSS 26.01 (USA).

Results: Baseline anthropometric data were similar in each group ($p > 0.05$). Among clinical parameters dyspnea and fatigue were more pronounced in group I than group II pregnant women ($p < 0.05$). BNP were significantly higher in group I than Group II (178.74 ± 56.45 pg/mL vs. 83.12 ± 24.6 pg/mL, $p < 0.05$). When we separately analysed by cardiac pathologies, BNP was significantly higher in myocarditis followed by hypertension and arrhythmias (195.24 ± 46.76 pg/mL vs. 174.12 ± 54.28 pg/mL vs. 148.12 ± 63.25 pg/mL, $p < 0.05$). As far as NT-proBNP was concerned, group I tended to have higher level of this biomarker than group II (254.67 ± 82.12 vs. 156.28 ± 65.35 pg/mL, $p < 0.001$). Among cardiac pathologies, myocarditis had higher level of NT-proBNP followed by hypertension and arrhythmias (285.27 ± 75.12 vs. 251.36 ± 79.12 vs. 231.28 ± 95.18 pg/mL, $p < 0.05$). When we analysed correlation BMI and biomarkers, there were positive correlation between them in Group II but not in Group I ($p < 0.05$).

Conclusions and Recommendations: BNP and NT-proBNP significantly increased in pregnant women with

cardiac pathologies. Early screening of the biomarkers might be essential tool for the early diagnosis of cardiac pathologies in pregnancy.

57ASM – 190 | BIO-Ra score as predictor of prognosis in castration resistant metastatic prostate cancer receiving Radium-223

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Introduction: Radium-223 is a therapeutic option in metastatic castration-resistant prostate (mCRPC) cancer patients with bone metastases. However, many studies showed that the benefit is lower than that reported in trial clinical trials, probably due to a suboptimal selection of patients. Therefore, the identification of prognostic factors to select mCRPC patients most likely to benefit from this treatment is needed. The BIO-Ra score, which combines clinical factors and peripheral inflammatory indices in a multifactorial score, is in study as a tool for helping patient's selection for Radium-223 treatment.

Objective: We studied the correlation between the BIO-Ra score and treatment completion with Ra-223 in the patients treated in our institution.

Materials and Methods: We conducted a cross-sectional study of all patients that were treated with at least one cycle of Ra-223 treatment. Clinical data for the BIO-Ra score calculation were collected before the first cycle. All data were statistically analysed.

Results: 31 patients with mCRPC received treatment with Ra-223 in our center. The median overall survival (mOS) of the entire cohort was 15.39 months. Regarding the Bio-Ra Score, the low-risk group had 8 (26.7%) patients, the intermediate-risk group 6 (20%) patients and the high-risk group 16 (53.3%) patients.

Bio-Ra Score showed an inverse correlation with the mOS ($r = -0.41$; $p = 0.034$). In the low-risk group patients completed in median 5.63 cycles, in intermediate risk 5.5 and in high risk group 4.25 cycles ($p = 0.035$).

Conclusion: According to this study, BIO-Ra score correlates with OS and a higher score is associated with lower mOS. Also, a higher score correlates with completing less cycles of the target 6 intended for Ra-223 treatment. This study supports clinical use of Ra-223 score.