Authors' response

In our published paper concerning the exercise capacity and plasma B-type natriuretic peptide (BNP) concentration in adults with a congenital heart defect, we presented analysis of data from the whole group as well as particular subgroups of patients [1].

As the author of this letter indicates, plasma BNP concentration in patients with Ebstein's anomaly amounts to 26.7 (5.2–178.2) pg/mL; and after Fallot's tetralogy operation 29.3 (6.2–159.4) pg/mL. Maximal oxygen consumption (VO2) averages 22.3 ± 5.0 and 24.9 ± 5.7 mL/kg/min, respectively. These values may imply a contradiction of the thesis whereby decreased oxygen consumption, meaning a deterioration of heart function, is not accompanied by an increase in plasma BNP level. The differences are, however, subtle, and do not reach statistical significance, Hence no generalized conclusions should be drawn.

As Dr Carvalho says, it is necessary to examine these dependences separately in every presented heart anomaly, and such research has been carried out and published by us [2, 3]. This has concluded that, following Fallot repair, concentration of plasma BNP is higher and correlates with the parameters of exercise capacity derived from the cardiopulmonary exercise test. In patients with Ebstein's anomaly, exercise capacity decreases alongside the progression of echocardiographic grading of the disease severity. However, plasma BNP concentrations do not correlate with this parameter.

All the presented papers concur with the conclusion stated by Dr Carvalho, namely that adults with a congenital heart defect who claim their heart function is normal, should nevertheless be provided with specialized cardiologic care.

References

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