

## PW2-11

### Exercise capacity and biventricular function in adult patients with repaired tetralogy of Fallot.

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#### INTRODUCTION:

Adult patients with repaired tetralogy of Fallot (rTOF) often have diminished right ventricular function and /or significant pulmonary regurgitation. Our aim was to examine whether these abnormalities play a role in diminuation of exercise function in patients with rTOF.

#### METHODS:

This was a retrospective review of 46 adult patients with rTOF. Right ventricular function (RV) and pulmonary regurgitation (PR) were assessed echocardiographically and by cardiovascular magnetic resonance (CMR). Peak oxygen consumption (peak  $VO_2$ ), predicted  $VO_2$ max for age and sex and ventilatory efficacy was measured by cardiopulmonary exercise test. All patients were clinically stable, their investigations were done within 1 year.

#### RESULTS:

The mean age of the cohort was 28 +/- 9years (48% females). Seven patients had PM/ICD. Seventy two percent of patients (n=33) were asymptomatic (NYHA class I). The mean peak  $VO_2$ max was 24+/-6 ml/hg/min , predicted peak  $VO_2$ max 69+/-17% and VE/ $VCO_2$  slope was 30+/-5. There were 27% of patients with  $\geq$  moderate right ventricular dysfunction and 72% with  $\geq$  moderate pulmonary regurgitation. There was no significant difference between mean peak  $VO_2$ max (25+/-5 vs. 23+/- 6 ml/hg/min, p=0,43 ), predicted peak  $VO_2$ max (69+/-17% vs 67/18%, p=0,86 ) and VE/ $VCO_2$  slope (30+/-5 vs 29+/-6, p=0,87) in patients with or without RV dysfunction and /or PR.

#### CONCLUSIONS:

Our data suggest that in a young, mostly asymptomatic cohort of patients with repaired tetralogy of Fallot at least moderate RV dysfunction and/or moderate pulmonary regurgitation exercise capacity may be preserved.