

183. Valvular Heart Disease in Patients with Parkinson's Disease Treated with Pergolide

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Background: Restrictive valvulopathy has been reported with pergolide, an ergot-derived dopamine agonist indicated in the treatment of Parkinson's disease (PD). Few data are available to estimate the incidence, severity and reversibility of this induced valvular disease.

Objectives: evaluation of frequency, grading of valvular regurgitation and relationship to pergolide cumulative dose as well as reversibility after drug cessation.

Methods: The transthoracic echocardiography findings were analysed in 30 patients and compared with those obtained in control patients (patients without PD referred for echocardiography but without known valvulopathy) and matched for age and sex. In 10 PD patients with restrictive valvulopathy, a new echocardiography was performed after a mean pergolide interruption of 14 months.

Results: 30 PD patients treated with pergolide were compared with 30 controls (same sex ratio 15 /15 and age 67.8 years \pm 10 vs 67.2 \pm 9.7 NS). A pattern of valvular restrictive regurgitation was observed in 13/30 patients taking pergolide (43%). Two patients had heart failure symptoms. Compared to controls, aortic as well as mitral regurgitation appeared to be much more frequently observed in PD patients with an odds ratio of respectively 3.1 (95 IC 1.1-8.8) and 10.7 (95 IC 2.1-53). The increase in frequency of tricuspid regurgitation was not significant. The number of affected valves and the sum of regurgitation grading were significantly higher in the pergolide group. No correlation could be found between cumulative dose of pergolide and severity of regurgitation. In 10 out of the 13 patients presenting a valvulopathy associated with pergolide, the drug was withdrawn. In 6 of these patients, regurgitation grades were found to be lower 10-18 months after drug withdrawal (no change in the 4 other cases). The two patients with heart failure returned to nearly normal examination.

Discussion/Conclusions: This study confirms the high frequency of valve regurgitation in PD patients treated with pergolide (33% in the Van Camp's study¹) and documents that a significant improvement may be observed when pergolide is stopped.

Reference

1. Van Camp G, et al. Treatment of Parkinson's disease with pergolide and relation to restrictive valvular heart disease. *Lancet* 2004; 363: 1179-83