A Prospective Study of Cardiac Valvular Status in Patients Treated with Cabergoline for Endocrine Disease

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INTRODUCTION: Since the 1990’s cabergoline has become the treatment of choice in prolactinomas, allowing rapid and efficient hormonal and tumoral control in most cases. Evidence of cardiac valculopathy was demonstrated in patients treated by dopamine agonists for Parkinson disease, which led to curtailment of their use in this disease. Retrospective studies in hyperprolactinemia patients treated with cabergoline did not show such an effect, probably due to much lower doses commonly used. However, prospective data with long-term follow-up are not widely available.

AIM: To undertake a novel prospective study of cardiac valvular function in patients treated by cabergoline for endocrine disease.

METHODS: 104 patients (34M, 70F; mean age 50.43 yr) treated with cabergoline for endocrine disease (hyperprolactinemia n=98, other n=6) were included. All patients and controls underwent a complete transthoracic echocardiographic study (TES) using the same equipment. All TES were performed by two experienced echocardiographers, with special attention towards valvular status and were interpreted by a third echocardiographer. The mean interval between TES while on cabergoline was 28.66 months +/- 11,26 months.

RESULTS: The mean total duration of cabergoline treatment was 75.81 months (+/- 75,25 months) and the mean total dose of cabergoline was 253.33mg (+/-515.76 mg) at last follow-up. Cardiovascular risk factors included: dyslipidemia (n=29), obesity (n=28), hypertension (n=22), diabetes (n=10), smoking (n=16). Three patients developed mild aortic insufficiency while 1 case had improved aortic valvular function on follow-up. One case developed a mild tricuspid insufficiency and 1 case developed a mild pulmonary valvular insufficiency, while 3 cases had normalization of pre-existing grade 1 valve dysfunction deficiency. No variation in mitral function was found.

DISCUSSION: In this prospective study, we found no relevant alteration in cardiac valvular function with cabergoline treatment. This suggests that findings from retrospective analyses are correct and that cabergoline remains a safe chronic treatment at the doses used in endocrine disease.