

Pharmaka-induzierte Herzklappenveränderungen

D. Blaschke, S. Rolf, A. S. Parwani, M. Huemer, R. Dietz, E. Garbe, W. Haverkamp

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Literatur

- 1** Abenheim L, Moride Y, Brenot F. et al. Appetite-suppressant drugs and the risk of primary pulmonary hypertension. International Primary Pulmonary Hypertension Study Group. *N Engl J Med* 1996; 335: 609-616
- 2** Baseman DG, O'Suilleabhain PE, Reimold SC. et al. Pergolide use in Parkinson disease is associated with cardiac valve regurgitation. *Neurology* 2004; 63: 301-304
- 3** Baumann MH, Ayestas MA, Dersch CM. et al. Effects of phentermine and fenfluramine on extracellular dopamine and serotonin in rat nucleus accumbens: therapeutic implications. *Synapse* 2000; 36: 102-113
- 4** Brenot F, Herve P, Petitpretz P. et al. Primary pulmonary hypertension and fenfluramine use. *Br Heart J* 1993; 70: 537-541
- 5** Cannistra LB, Davis SM, Bauman AG. Valvular heart disease associated with dexfenfluramine. *N Engl J Med* 1997; 337: 636
- 6** Connolly HM, Crary JL, McGoon MD. et al. Valvular heart disease associated with fenfluramine-phentermine. *N Engl J Med* 1997; 337: 581-588
- 7** Creutzig A. [Ergotamine-induced heart valve fibrosis and coronary microangiopathy?]. *Dtsch Med Wochenschr* 1992; 117: 1736
- 8** Danoff SK, Grasso ME, Terry PB. et al. Pleuropulmonary disease due to pergolide use for restless legs syndrome. *Chest* 2001; 120: 313-316
- 9** Devereux RB. Appetite suppressants and valvular heart disease. *N Engl J Med* 1998; 339: 765-766
- 10** Droogmans S, Cosyns B, D'haenen H. et al. Possible association between 3,4-methylenedioxymethamphetamine abuse and valvular heart disease. *Am J Cardiol* 2007; 100: 1442-1445
- 11** Droogmans S, Franken PR, Garbar C. et al. In vivo model of drug-induced valvular heart disease in rats: pergolide-induced valvular heart disease demonstrated with echocardiography and correlation with pathology. *Eur Heart J* 2007; 28: 2156-2162
- 12** Dupuy D, Lesbre JP, Gerard P. et al. Valvular heart disease in patients with Parkinson's disease treated with pergolide. Course following treatment modifications. *J Neurol* 2008; 255: 1045-1048
- 13** Faber L. [Ergotamine-induced heart valve fibrosis]. *Dtsch Med Wochenschr* 1993; 118: 205
- 14** Fitzgerald LW, Burn TC, Brown BS. et al. Possible role of valvular serotonin 5-HT(2B) receptors in the cardiopathy associated with fenfluramine. *Mol Pharmacol* 2000; 57: 75-81
- 15** Gardin JM, Weissman NJ, Leung C. et al. Clinical and echocardiographic follow-up of patients previously treated with dexfenfluramine or phentermine/fenfluramine. *JAMA* 2001; 286: 2011-2014
- 16** Graham DJ, Green L. Further cases of valvular heart disease associated with fenfluramine-phentermine. *N Engl J Med* 1997; 337: 635
- 17** Gustafsson BI, Tommeras K, Nordrum I. et al. Long-term serotonin administration induces heart valve disease in rats. *Circulation* 2005; 111: 1517-1522
- 18** Hendriks M, Van Dorpe J, Flameng W. et al. Aortic and mitral valve disease induced by ergotamine therapy for migraine: a case report and review of the literature. *J Heart Valve Dis* 1996; 5: 235-237

- 19 Horvath J, Fross RD, Kleiner-Fisman G. et al. Severe multivalvular heart disease: a new complication of the ergot derivative dopamine agonists. *Mov Disord* 2004; 19: 656-662
- 20 Howard RJ, Drobac M, Rider WD. et al. Carcinoid heart disease: diagnosis by two-dimensional echocardiography. *Circulation* 1982; 66: 1059-1065
- 21 Kastelik JA, Aziz I, Greenstone MA. et al. Pergolide-induced lung disease in patients with Parkinson's disease. *Respir Med* 2002; 96: 548-550
- 22 Kaumann AJ. Do human atrial 5-HT₄ receptors mediate arrhythmias?. *Trends Pharmacol Sci* 1994; 15: 451-455
- 23 Kaumann AJ, Levy FO. 5-hydroxytryptamine receptors in the human cardiovascular system. *Pharmacol Ther* 2006; 111: 674-706
- 24 Khan MA, Herzog CA, St Peter JV. et al. The prevalence of cardiac valvular insufficiency assessed by transthoracic echocardiography in obese patients treated with appetite-suppressant drugs. *N Engl J Med* 1998; 339: 713-718
- 25 Kulke MH, Mayer RJ. Carcinoid tumors. *N Engl J Med* 1999; 340: 858-868
- 26 Ling LH, Ahlskog JE, Munger TM. et al. Constrictive pericarditis and pleuropulmonary disease linked to ergot dopamine agonist therapy (cabergoline) for Parkinson's disease. *Mayo Clin Proc* 1999; 74: 371-375
- 27 Mark EJ, Patalas ED, Chang HT. et al. Fatal pulmonary hypertension associated with short-term use of fenfluramine and phentermine. *N Engl J Med* 1997; 337: 602-606
- 28 Moller JE, Connolly HM, Rubin J. et al. Factors associated with progression of carcinoid heart disease. *N Engl J Med* 2003; 348: 1005-1015
- 29 Moysakakis IE, Rallidis LS, Guida GF. et al. Incidence and evolution of carcinoid syndrome in the heart. *J Heart Valve Dis* 1997; 6: 625-630
- 30 Nutt JG, Wooten GF. Clinical practice. Diagnosis and initial management of Parkinson's disease. *N Engl J Med* 2005; 353: 1021-1027
- 31 Pellikka PA, Tajik AJ, Khandheria BK. et al. Carcinoid heart disease. Clinical and echocardiographic spectrum in 74 patients. *Circulation* 1993; 87: 1188-1196
- 32 Peralta C, Wolf E, Alber H. et al. Valvular heart disease in Parkinson's disease vs. controls: An echocardiographic study. *Mov Disord* 2006; 21: 1109-1113
- 33 Pinero A, Marcos-Alberca P, Fortes J. Cabergoline-related severe restrictive mitral regurgitation. *N Engl J Med* 2005; 353: 1976-1977
- 34 Pritchett AM, Morrison JF, Edwards WD. et al. Valvular heart disease in patients taking pergolide. *Mayo Clin Proc* 2002; 77: 1280-1286
- 35 Rasmussen VG, Poulsen SH, Dupont E. et al. Ergotamine-derived dopamine agonists and left ventricular function in Parkinson patients: systolic and diastolic function studied by conventional echocardiography, tissue Doppler imaging, and two-dimensional speckle tracking. *Eur J Echocardiogr* 2008; 9: 803-808
- 36 Rasmussen VG, Poulsen SH, Dupont E. et al. Heart valve disease associated with treatment with ergot-derived dopamine agonists: a clinical and echocardiographic study of patients with Parkinson's disease. *J Intern Med* 2008; 263: 90-98
- 37 Redfield MM, Nicholson WJ, Edwards WD. et al. Valve disease associated with ergot alkaloid use: echocardiographic and pathologic correlations. *Ann Intern Med* 1992; 117: 50-52
- 38 Robiolio PA, Rigolin VH, Wilson JS. et al. Carcinoid heart disease. Correlation of high serotonin levels with valvular abnormalities detected by cardiac catheterization and echocardiography. *Circulation* 1995; 92: 790-795
- 39 Roth BL. Drugs and valvular heart disease. *N Engl J Med* 2007; 356: 6-9
- 40 Rothman RB, Baumann MH. Therapeutic and adverse actions of serotonin transporter substrates. *Pharmacol Ther* 2002; 95: 73-88
- 41 Rothman RB, Baumann MH, Savage JE. et al. Evidence for possible involvement of 5-HT_{2B} receptors in the cardiac valvulopathy associated with fenfluramine and other serotonergic medications. *Circulation* 2000; 102: 2836-2841

- 42** Sakai D, Murakami M, Kawazoe K. et al. Ileal carcinoid tumor complicating carcinoid heart disease and secondary retroperitoneal fibrosis. *Pathol Int* 2000; 50: 404-411
- 43** Schade R, Andersohn F, Suissa S. et al. Dopamine agonists and the risk of cardiac-valve regurgitation. *N Engl J Med* 2007; 356: 29-38
- 44** Serratrice J, Disdier P, Habib G. et al. Fibrotic valvular heart disease subsequent to bromocriptine treatment. *Cardiol Rev* 2002; 10: 334-336
- 45** Setola V, Hufeisen SJ, Grande-Allen KJ. et al. 3,4-methylenedioxymethamphetamine (MDMA, „Ecstasy”) induces fenfluramine-like proliferative actions on human cardiac valvular interstitial cells in vitro. *Mol Pharmacol* 2003; 63: 1223-1229
- 46** Setola V, Roth BL. Screening the receptorome reveals molecular targets responsible for drug-induced side effects: focus on ‘fen-phen’. *Expert Opin Drug Metab Toxicol* 2005; 1: 377-387
- 47** Shively BK, Roldan CA, Gill EA. et al. Prevalence and determinants of valvulopathy in patients treated with dexfenfluramine. *Circulation* 1999; 100: 2161-2167
- 48** Steffee CH, Singh HK, Chitwood WR. Histologic changes in three explanted native cardiac valves following use of fenfluramines. *Cardiovasc Pathol* 1999; 8: 245-253
- 49** Van Camp G, Flamez A, Cosyns B. et al. Heart valvular disease in patients with Parkinson's disease treated with high-dose pergolide. *Neurology* 2003; 61: 859-861
- 50** Van Camp G, Flamez A, Cosyns B. et al. Treatment of Parkinson's disease with pergolide and relation to restrictive valvular heart disease. *Lancet* 2004; 363: 1179-1183
- 51** Weissman NJ, Tighe JF Jr, Gottdiener JS. et al. An assessment of heart-valve abnormalities in obese patients taking dexfenfluramine, sustained-release dexfenfluramine, or placebo. Sustained-Release Dexfenfluramine Study Group. *N Engl J Med* 1998; 339: 725-732
- 52** Wilke A, Hesse H, Hufnagel G. et al. Mitral, aortic and tricuspid valvular heart disease associated with ergotamine therapy for migraine. *Eur Heart J* 1997; 18: 701
- 53** Zanettini R, Antonini A, Gatto G. et al. Valvular heart disease and the use of dopamine agonists for Parkinson's disease. *N Engl J Med* 2007; 356: 39-46