

Physical activity, heart and ageing: a morpho-functional study by Echo-Color-Doppler in sedentary and non sedentary healthy subjects

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SUMMARY

Several papers have shown that in young people sports activity is associated with a higher prevalence of cardiac valves incompetence, that can be detected, though to a lesser extent, even in healthy subjects randomly selected from the population. Aim of the present study was to analyse the effects of physical activity not only in young subjects but even in the elderly, with particular reference to valve competence, by using the Echo-Color-Doppler. The study cohort was represented by 80 healthy young subjects, 40 men and 40 women, aged between 20 and 25 years, each group subdivided into two subgroups, sedentary and non sedentary, and 80 healthy elderly subjects, 40 men and 40 women, aged between 65 and 91 years, again divided into sedentary and non sedentary. Valve incompetence was more frequent in the elderly if compared to young subjects ($P < 0.001$) and in non sedentary if compared to sedentary subjects ($P < 0.01$), while no significant difference was found between males and females. Worth of interest the fact that in young subjects valve incompetence was more frequent in non sedentary if compared to sedentary subjects ($P < 0.001$), while in the elderly no significant difference was found between sedentary and non sedentary subjects. This original datum may be explained both by the natural higher prevalence of valve incompetence in the elderly, and by the kind of physical activity usually performed by the elderly, i.e. endurance activity.