

Is infective endocarditis of any concern in pediatric Marfan patients?

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Introduction:

In historical data there has been concern about a higher risk of infective endocarditis in Marfan patients, especially in those with mitral valve prolapse (Mark H, 1974). Patients with congenital heart disease are known to have a higher risk for endocarditis. Still, current adult guidelines do not suggest antibiotic prophylaxis in Marfan patients (Habib G, 2015). So far there have been no data concerning the risk of endocarditis in a pediatric Marfan population.

Methods: Since 2008 we investigated 424 patients with suspected MFS. 149 patients were diagnosed with MFS (9.5±5.8y, 62% male). We retrospectively analyzed our databank looking at the incidence of infective endocarditis. Subgroup analysis concerning risk factors like mitral valve prolapse, tricuspid valve prolapse, aortic insufficiency and bicuspid aortic valve were analyzed. Patients being operated on the aortic arch or any heart valve were excluded.

Results:

In our cohort we have not seen a single case of endocarditis over 978.5 patient years.

Risk factors like mitral valve prolapse (40,9%), tricuspid valve prolapse (30,2%), aortic insufficiency (6,7%), bicuspid aortic valve (12,7%) had no effect on the incidence of infective endocarditis.

Demographic data	n		
patients	149		
Age (years) at first visit	9,5	±5.8	
Total patient years	978,5		
	n	%	Endocarditis
Mitral valve prolapse	61	40,9	0
Tricuspid valve prolapse	45	30,2	0
Aortic insufficiency	10	6,7	0
Bicuspid aortic valve	19	12,7	0
Total			0

Table 1: Demographic data and incidence of infective endocarditis in pediatric Marfan patients

Conclusions:

In our cohort of pediatric Marfan patients we have not experienced a single case of infective endocarditis over a time period of 978,5 patient years. Even patients with known risk factors were not affected. These early data from our single centre study suggest that the recommendations to not apply endocarditis prophylaxis in pediatric Marfan patients seem appropriate. Nationwide registry based data could help to elucidate this question.