

C73. Stentless Aortic Valve Bioprosthesis Dehiscence? A Possible Infective Endocarditis With Atypical Presentation But Serious Consequences

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OBJECTIVES: We recently reported an atypical possible infective endocarditis (PVIE) occurring on a stentless Cryolife O'Brien® without inflammatory markers, negative blood cultures but anatomic damage suggestive of IE and thus looked for other cases with similar presentation.

METHODS: We reviewed all cases of possible or definite aortic PVIE according to the modified Duke criteria hospitalized in our institution between January 2002 and March 2008.

RESULTS: Sixty patients (26 mechanical, 11 stented and 23 stentless Cryo-Life O'Brien® prosthesis) with possible or definite aortic PVIE were admitted during this period. Compared to mechanical or stented prosthesis, patients with stentless valve presented less frequently with fever ($p=0.003$), tended to present more frequently in congestive heart failure ($p=0.10$), less frequently with positive blood cultures ($p=0.08$) and with lower CRP levels ($p=0.02$). Patients with stentless valve also presented less frequently with vegetations ($p=0.01$) but more frequently with valve dehiscence ($p=0.006$) and severe regurgitation ($p=0.01$). Forty patients were operated on, more frequently in the stentless group (83% vs. 61% and 45% respectively, $p=0.07$). Compared to the previously reported incidence of stentless PVIE at our institution (1.5%), we observed a striking increase incidence after 2004 ($>7%$), which corresponds to changes in the manufacturing process.

CONCLUSIONS: We report a frequent and atypical clinical and microbiological presentation of possible PVIE occurring with stentless Cryolife O'Brien® with a striking increased incidence after 2004 which corresponds to changes in the manufacturing process. Whatever the exact etiology (infectious, toxic ...), clinicians should be aware of this atypical clinical presentation with serious consequences. The stentless Cryo-Life O'Brien® bioprosthesis is not anymore implanted at our institution.

	Mechanical n=26	Stented bioprosthesis n=11	Stentless bioprosthesis n=23	p
Fever	77%	91%	39%	0.003
congestive heart failure	23%	36%	54%	0.10
Positive blood cultures	65%	82%	44%	0.08
CRP, mg/L	144±106	145±123	69±70	0.02
Vegetations	58%	63%	22%	0.01
Valve dehiscence	23%	22%	68%	0.006
Severe aortic regurgitation	23%	36%	65%	0.01