

USE OF BROAD RANGE PCR OF RESECTED VALVES FOR DIAGNOSIS OF ENDOCARDITIS IN A TERTIARY CARE CENTER IN TUNISIA

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INTRODUCTION AND PURPOSE

- Blood culture negative endocarditis (BCNE) were reported in up to 50 % of cases. Serology and PCR analysis of the 16S rDNA gene have been proposed to improve this diagnosis.
- In this study, we report our 5 years experience in identifying microorganisms using broad range PCR performed on removed cardiac valves from patients operated for IE.

METHODS

We included all patients operated for IE between January 2007 and December 2011 in our Hospital (SFAX). Removed cardiac valves were subjected to 16S rDNA PCR followed by sequencing.

RESULTS

Number of included patients : 24

Mean age = 42.5 years

Table 1: Underlying Heart disease in patients operated for IE

underlying hear disease	Number (%)
Rheumatic heart disease	8 (33)
Prosthetic valve	6 (25)
Degenerative valvulopathy	6 (25)
Congenital valvulopathy	1 (4)
No underlying hear disease	3 (13)

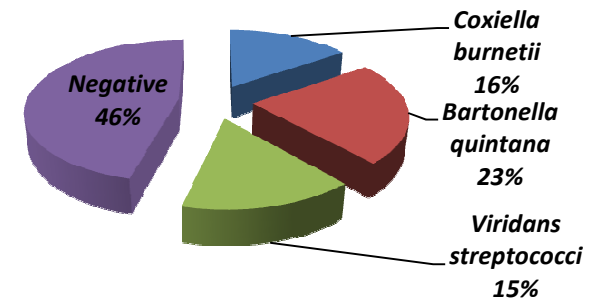
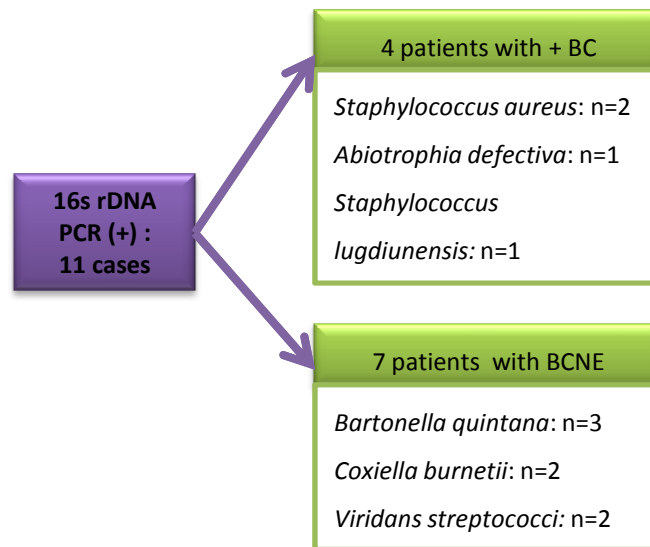
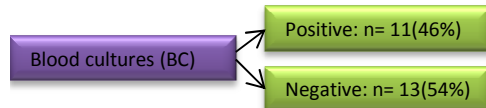


Fig2: Results of 16S rDNA PCR in patients operated for BCNE

Etiological diagnosis of IE have been established for 18 patients (75%): * **positive blood culture: 11 patients**
* **positive 16S rDNA PCR: 7 patients**

CONCLUSIONS

In this study, in spite of the low number of patients, we noted that the broad range PCR improved the diagnosis of BCNE. This PCR enabled us to identify microorganisms that could not be cultured and that necessitate specific antibiotic such us *Bartonella* and *Coxiella*