
Best of
« Infections cardio-vasculaires »

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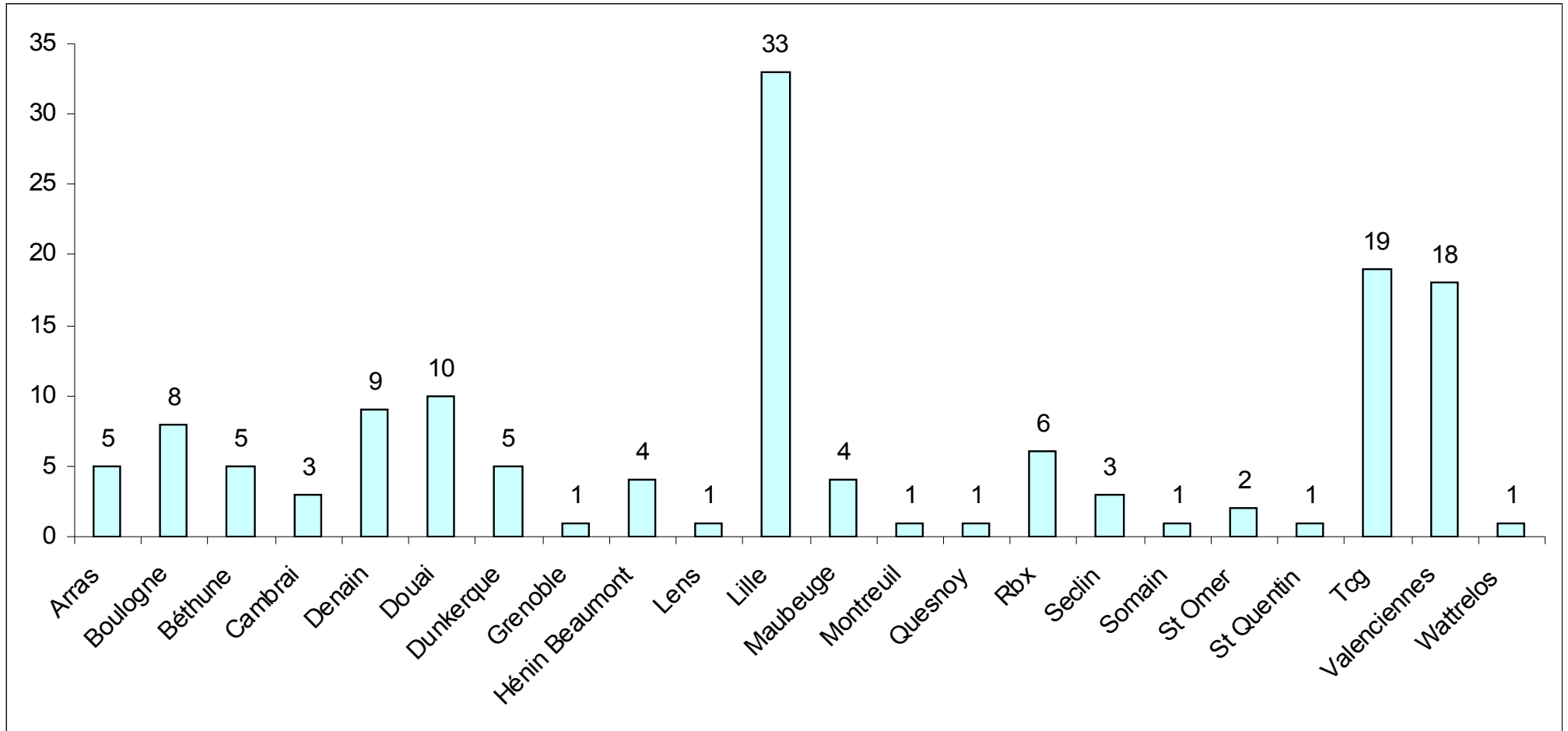
Endocardites infectieuses

Characteristics and Prognosis of Patients Requiring Valve Surgery During Active Infective Endocarditis

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Provenance des patients



Characteristics and Prognosis of Patients Requiring Valve Surgery During Active Infective Endocarditis

Table I: Demographic characteristics of the study population (n = 141).

Characteristic	No. of patients	Operative mortality
Male gender	108 (77)	16 (15)
Age (years)*	56.3 ± 14.9	-
Underlying valve disease	20 (14)	1 (5)
Previous history of IE	4 (3)	2 (50)
Identified portal of entry	74 (52)	12 (16)
Dental	33 (23)	3 (9.0)
Cutaneous	13 (9)	2 (15)
Digestive tract	9 (6)	2 (22)
Intravenous drug use	8 (6)	0 (0)
Cardiovascular procedure or vascular access	7 (5)	2 (29)
Genitourinary tract	4 (3)	2 (50)
Hospital-acquired IE	12 (9)	3 (25)

Table II: Echocardiographic data related to infective endocarditis.

Finding	No. of patients	Operative mortality
Infection site (n)		
Left side	118	19 (16)
Mitral	49	8 (16)
Aortic	55	10 (18)
Combined aortic and mitral	14	1 (7)
Right side	17	1 (6)
Tricuspid	15	1 (7)
Pulmonary	2	0
Combined left and right side	7	1 (14)
Vegetations (n)	128	-
>15 mm	39	4 (10)
Annular abscess (n)	25	7 (28)

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Table III: Causative microorganisms (n = 140) isolated from cases of active infective endocarditis.

Microorganism	No. of patients	Operative mortality
<i>Streptococcus</i> spp.	46 (33)	5 (11)
<i>Enterococcus</i> spp.	27 (19)	5 (18)
<i>Staphylococcus aureus</i>	34 (24)	6 (18)
Methicillin-susceptible	30	5 (17)
Methicillin-resistant	4	1 (25)
Coagulase-negative <i>Staphylococcus</i>	15 (11)	2 (13)
Gram-negative bacilli	12 (9)	2 (17)
<i>Haemophilus influenza</i>	6	1 (17)
Other	6	1 (17)
<i>Corynebacterium</i> spp.	2 (1.5)	0 (0)
<i>Propionibacterium</i> spp.	1 (0.5)	0 (0)
<i>Candida</i> spp.	2 (1.5)	2 (100)
<i>Aspergillus</i> spp.	1 (0.5)	0 (0)

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103/140 Amox-clav. + genta = OK

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During hospitalization, 22 patients (16%) died.

Table IV: Univariate analysis of in-hospital mortality.

Factor	Survivors	Non-survivors	p-value
Mean age (years)	55 ± 15.4	62 ± 10.7	0.05
Male gender	92/119	16/22	0.64
Prosthetic valve endocarditis	12/119	7/22	0.006
Staphylococcal IE	38/110	8/21	0.68
Neurological complications	31/97	6/16	0.66
Vegetations >15 mm	35/119	4/22	0.41
Annular abscess	18/119	7/22	0.06
CHF as indication for surgery	27/119	9/22	0.07
Implantation of mechanical prosthesis	41/119	11/22	0.16
Adequate antimicrobial treatment	70/93	7/15	0.02

Infections de prothèses vasculaires

- Création, en 2005, d'un groupe multidisciplinaire
 - Anesthésistes
 - Chirurgiens
 - Infectiologues
 - Microbiologistes
 - Radiologues
 - Réanimateurs
-

Infections de prothèses vasculaires

ORIGINAL ARTICLE

10.1111/j.1469-0691.2011.03618.x

Characteristics and prognosis in patients with prosthetic vascular graft infection: a prospective observational cohort study

L. Legout¹, B. Sarraz-Bournet², P. V. D'Elia^{2,3}, P. Devos⁴, A. Pasquet¹, M. Caillaux⁵, F. Wallet⁶, Y. Yazdanpanah¹, E. Senneville¹, S. Haulon⁶ and O. Leroy⁷

Infections de prothèses vasculaires

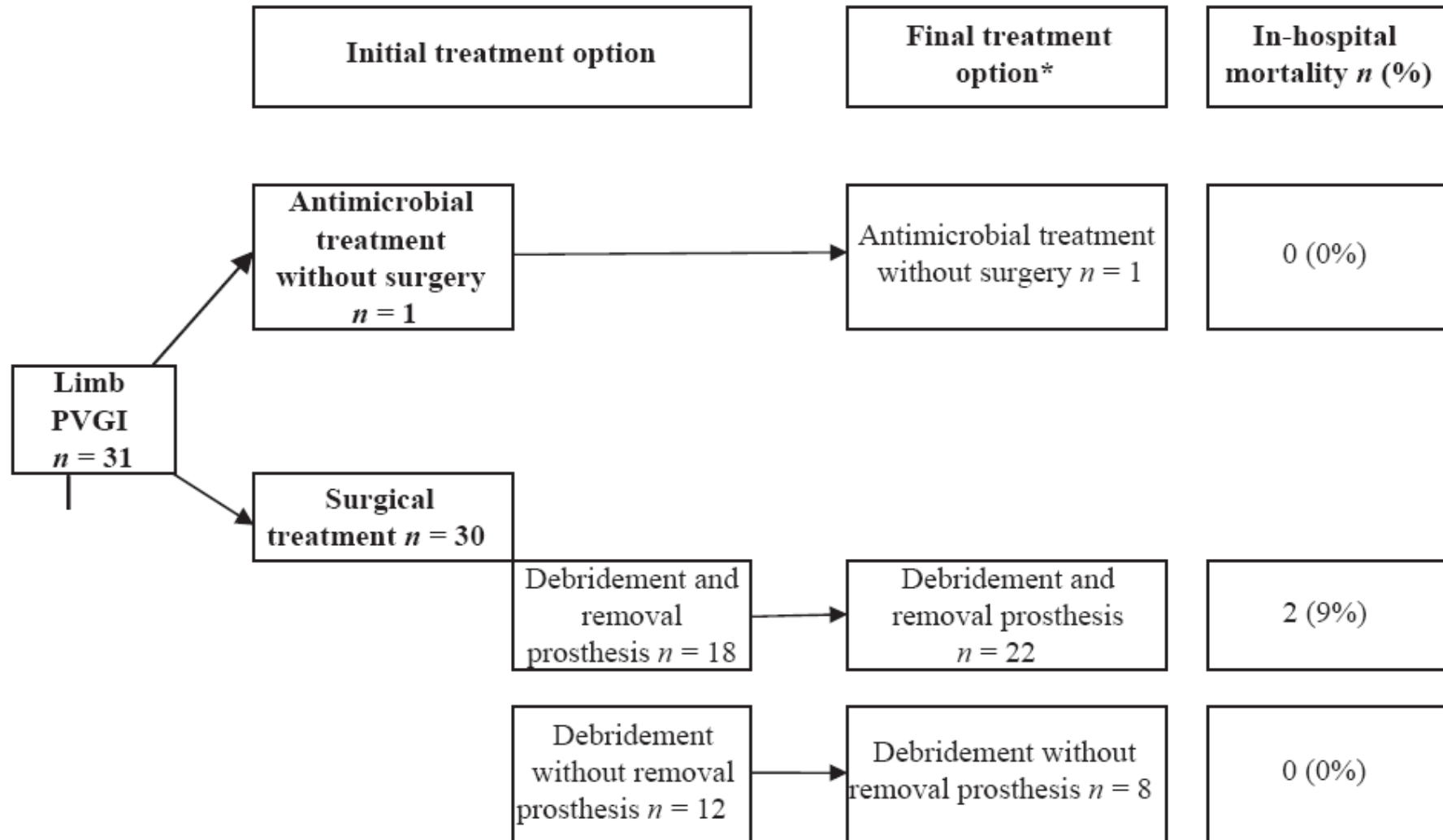
Characteristics	Early PVGI (n = 49)	Late PVGI (n = 36)
Positive blood samples	20	9
Polymicrobial infection	12	8
Number of microorganisms isolated	63	41
Gram-positive bacteria	35 (55.5)	22 (53.6)
<i>Staphylococcus aureus</i>	20 (40.8)	9 (21.9)
Coagulase-negative <i>Staphylococcus</i>	8 (12.7)	5 (12.2)
<i>Enterococcus</i> sp.	4 (6.3)	3 (7.3)
<i>Streptococcus</i> sp.	3 (4.7)	4 (9.7)
Other Gram-positive bacteria	0 (0)	1 (2.4)
Gram-negative bacilli	20 (31.7)	15 (36.6)
<i>Enterobacteriaceae</i>	19 (30.1)	13 (31.7)
<i>Pseudomonas</i> sp.	1 (2)	2 (4.8)
Anaerobes	6 (12.2)	2 (4.8)
<i>Candida</i> sp.	2 (2)	2 (4.8)
No growth	2 (4.1)	5 (13.8)

Infections de prothèses vasculaires

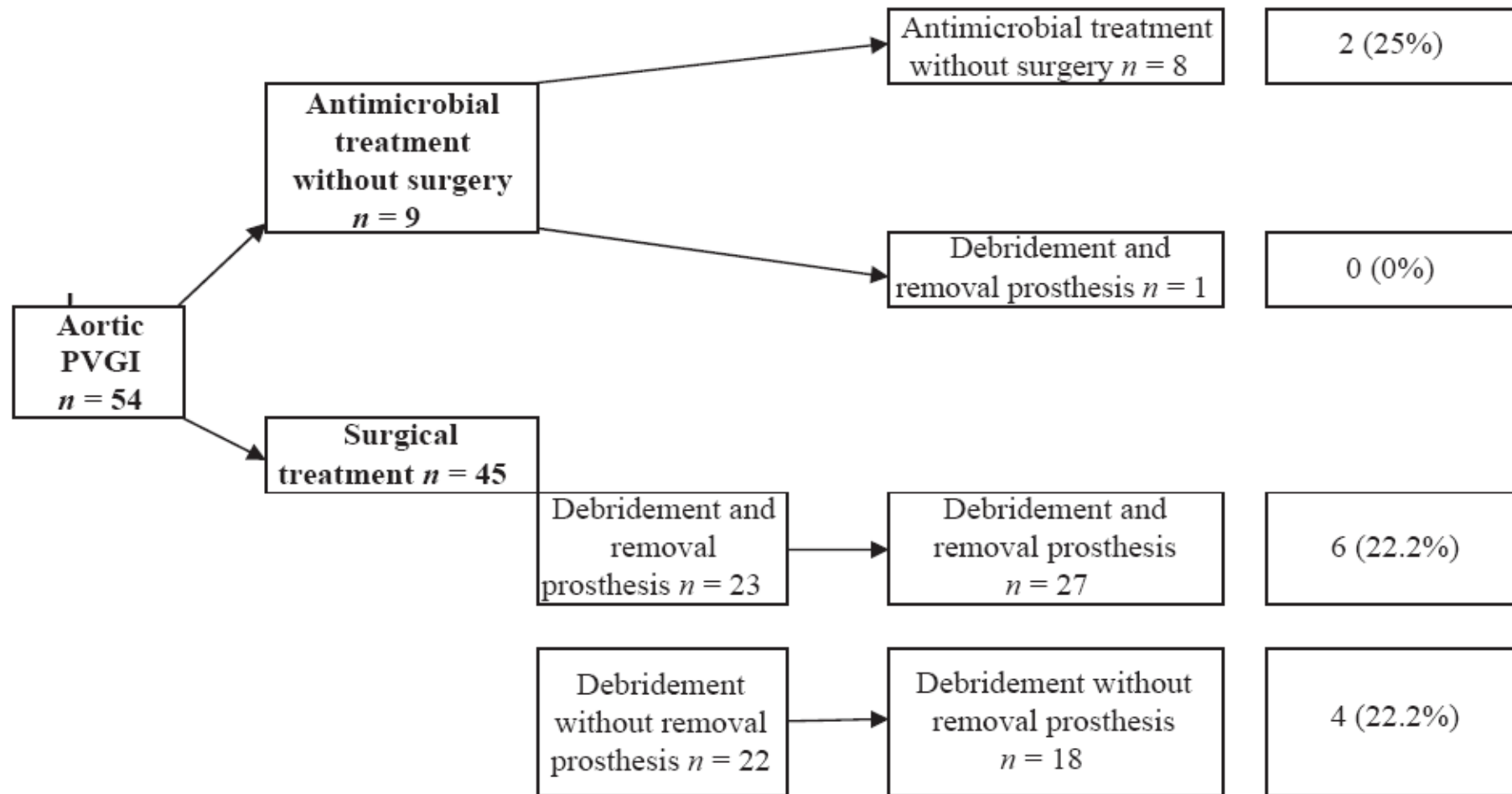
Characteristics	Aortic PVGI (n = 54)	Limb PVGI (n = 31)
Positive blood samples	22	7
Polymicrobial infection	12	8
Number of microorganisms isolated	64	40
Gram-positive bacteria	34 (53.1)	23 (57.5)
<i>Staphylococcus aureus</i>	12 (18.7)	17 (42.5)
Coagulase-negative <i>Staphylococcus</i>	10 (15.6)	3 (7.5)
<i>Enterococcus</i> sp.	5 (7.8)	2 (5)
<i>Streptococcus</i> sp.	6 (9.3)	1 (2.5)
Other Gram-positive bacteria	1 (1.5)	0 (0)
Gram-negative bacilli	21 (32.8)	14 (35)
<i>Enterobacteriaceae</i>	20 (31.2)	12 (30)
<i>Pseudomonas</i> sp.	1 (1.5)	2 (5)
Anaerobes	6 (9.3)	2 (5)
<i>Candida</i> sp.	3 (4.6)	1 (2.5)
No growth	6 (9.3)	1 (2.5)



Infections de prothèses vasculaires



Infections de prothèses vasculaires



Infections de prothèses vasculaires

Multivariate analysis of risk factors for in-hospital mortality

Variable	OR (95% CI)	p-value
Complete model		
Aortic graft infection	9.17 (1.42–58.87)	0.02
Early-onset infection	0.34 (0.09–1.36)	0.13
Age >70 years	10.74 (1.76–65.48)	0.01
PVGI caused by Gram-negative bacilli	2.41 (0.58–9.98)	0.22
Surgical debridement with excision of infected graft	2.84 (0.62–13.0)	0.18
Logistic procedure		
Aortic graft infection	5.6 (1.1–28.7)	0.037
Age >70 years	9.1 (1.83–45.43)	0.007

PVGI, prosthetic vascular graft infection.



ELSEVIER

BIAA
British Infection Association

www.elsevierhealth.com/journals/jinf

Vascular graft infections in the intensive care unit: Clinical spectrum and prognostic factors

Magdalena Szczot^a, Agnès Meybeck^{a,*}, Laurence Legout^b,
Armelle Pasquet^b, Nicolas Van Grunderbeeck^a, Joachim Langlois^a,
Béatrice Sarraz-Bournet^c, Patrick Devos^d, Olivier Leroy^a

Infections de prothèses vasculaires

- Janvier 2006-
Juin 2009
- 37 patients admis
dans le service de
réanimation du
CH de Tourcoing

Vascular graft infection characteristics

Type of vascular graft:

Aortic	21 (57)
Femoropopliteal or iliopopliteal	9 (24)
Femorofemoral	8 (22)
Iliofemoral	4 (11)

Type of infection:

Early-onset infection	18 (49)
Late-onset infection	15 (41)
Bacteriemia	4 (11)

Infections de prothèses vasculaires

Microbiological data

Polymicrobial infection	6 (16)
Aerobes cocci Gram-positive	22 (59)
Enterobacteriae	16 (43)
Anaerobes	3 (8)
Fungi	2 (5)
Other	3 (8)

Treatment was simply medical in four cases of early bacteremia.

In 33 cases, treatment combined antimicrobial therapy and surgical procedure:

- local debridement with retention of the graft (n = 5),
- complete graft excision without revascularization (n = 1)
- complete graft excision with vascular reconstruction (n = 27).

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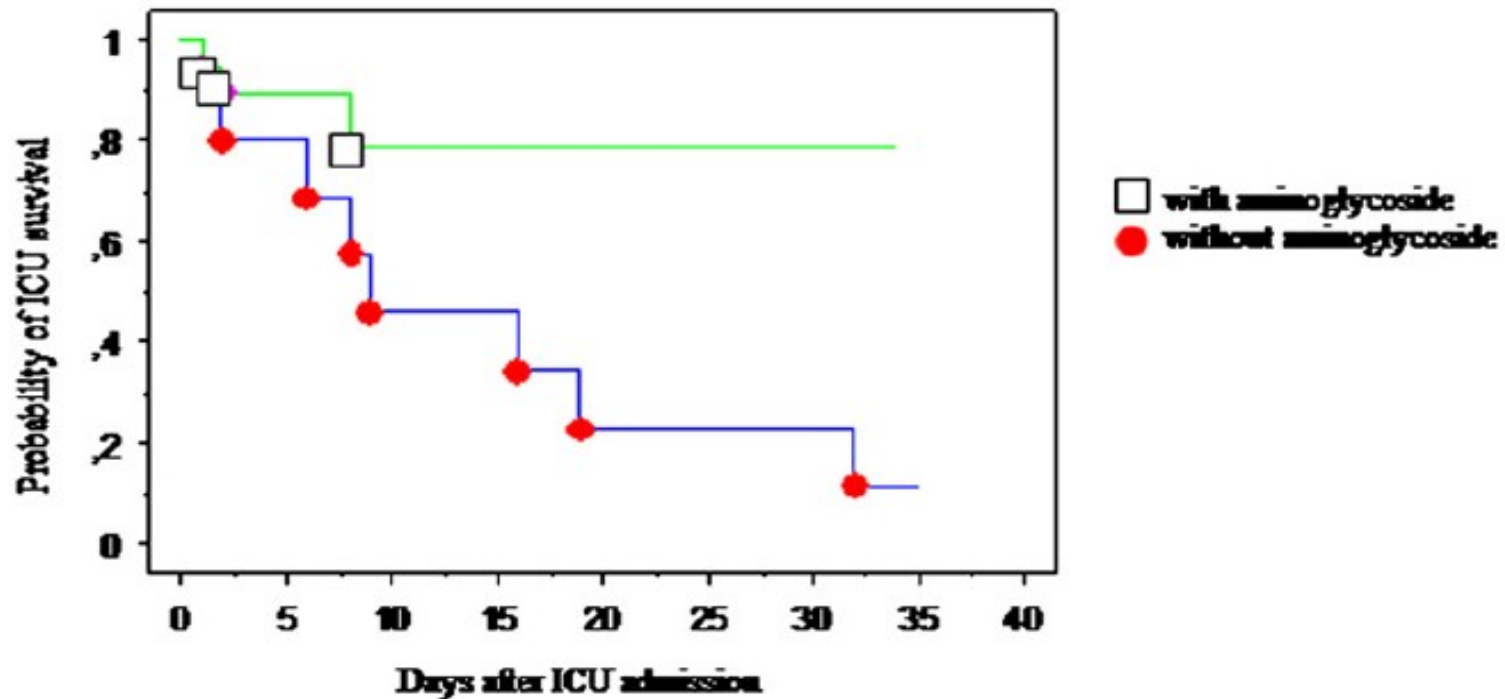
<i>Death in ICU:</i>	12/37 (32.4)
Hemorrhagic shock	6 (16)
Septic shock	5 (14)
Mesenteric ischemia	1 (3)

Table 3 Factors associated with in ICU mortality in case of definite infections, univariate analysis.^a

Characteristics	Non survivors <i>n</i> = 11	Survivors <i>n</i> = 22	<i>p</i>
Age >70 years	8 (73)	6 (27)	0.04
Extra-anatomic bypass	5 (45)	3 (14)	0.05
Intraoperative blood transfusion	6 ± 3	3 ± 2	0.004
Intraoperative fresh frozen plasma (units)	2.8 ± 2.8	0.7 ± 1.2	0.02
dialysis	5 (45)	3 (14)	0.05
Schock	10 (91)	8 (36)	0.003

By multivariate analysis, only shock was associated with death in ICU (adjusted odds ratio: 16.3; 95% CI: 1.7e152.1; *p*=0.01).

Infections de prothèses vasculaires



Conclusions

A scenic landscape featuring rolling hills in the foreground, a body of water in the middle ground, and a range of mountains in the background under a sky filled with large, white clouds. The overall tone is serene and expansive.

- Merci à tous nos correspondants et amis qui nous adressent ces patients