

**Infective endocarditis in Spain: 1000 consecutive cases from a prospective cohort study (GAMES)**

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**Objectives:** To describe the epidemiologic and clinical characteristics and outcome of a recent cohort of 1,000 patients with infective endocarditis (IE) studied by the Spanish Collaboration on Endocarditis (GAMES).

**Methods:** Since January 2008, we have prospectively collected consecutive cases of IE diagnosed in 26 Spanish hospitals of different sizes. Multidisciplinary teams complete a standardized case report form (CRF). IE is defined according to the Duke criteria. Results: We report the results from the first 1000 patients recruited to date by GAMES (mean age  $64 \pm 16$  y, 70% men). Age-adjusted mean comorbidity index is  $4.4 \pm 2.7$ ; 43% have valvular disease, 26.5% diabetes mellitus, 18% chronic obstructive pulmonary disease and 14.5% renal insufficiency. IE is nosocomial or health care-related in 37.7%. An etiological diagnosis is available in 88% of cases (Staphylococcus aureus, 25.6%; coagulase-negative staphylococci, 17.7%; Enterococcus spp, 12%).

Cardiac surgery was performed in 43.6%. In-hospital mortality was 27.9%. We compared the characteristics of 35 cases of native-valve IE in intravenous drug users (IVDU), 626 native-valve IE in non-IVDU, 261 prosthetic IE and 78 IE affecting intracardiac devices (Table 1). **Conclusion:** GAMES has collected a large series of IE over a short period of time. HIV infection and IVDU are rare underlying conditions today. Nosocomial and health care-related IE account for a significant proportion of cases. Mortality remains high especially for prosthetic endocarditis. Multidisciplinary groups are essential to optimize management and outcome of this severe disease.

Type of endocarditis	Native valve in IVDU N=35	Native valve in non-IVDU N=626	Prosthetic N=261	Intracardiac devices N=78	p
Mean age (y)	39.3	64.5	66.6	67.8	<.01
HIV (%)	45.7	1.8	.8	0	<.01
Previous infective endocarditis (%)	11.4	4.5	11.9	1.3	<.01
Community-acquired (%)	91.4	66.3	47.5	38.5	<.01
Aortic valve (%)	22.9	46.2	59.8	5.1	<.01
<i>Staphylococcus aureus</i> (%)	63.6	30.9	17	38	<.01
Negative blood cultures (%)	8.6	13.6	13.2	11.8	0.8
Embolisms (%)	54.3	30.2	29.1	21.3	<.01
Intracardiac complications (%)	14.3	27.4	35.2	5.1	<.01
Transoesophageal echocardiography (%)	43	71	88	73	<.01
Cardiac insufficiency	28.6	44	43	17	<.01
Heart surgery (%)	22.9	41.4	44.4	69.2	<.01
Death (%)	17	25.7	38.3	16.7	<.01