

P1147

**Paper Poster Session
Endocarditis**

Epidemiology, clinical features and outcome of infective endocarditis due to *Granulicatella* spp. and *Abiotrophia* spp.: Report of 67 cases (2000-2014)

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Background: Infectious endocarditis (IE) caused by the *Granulicatella* (GRA) and *Abiotrophia* (ABI) *genera* represent about 1-3% of all IE. Their clinical features and outcomes are poorly studied. This work aims to describe and compare the main epidemiology, clinical features and outcome of IE due to GRA and ABI.

Material/methods: We performed a retrospective study of 12 institutional cases of IE caused by GRA or ABI and 55 cases published in the literature. Articles in Spanish and English, published between 2000 and 2014, were evaluated. STATA software was used for all analyses.

Results: 32 cases of ABI IE and 35 cases of GRA IE were included in the final analysis. 20 (62.5%) ABI cases and 25 (71.4%) GRA cases involved males ($p=0.43$). Congenital heart disease was reported in 0 ABI and in 5 (14.3%) GRA cases ($p<0.05$). Most cases were community-acquired: 31 (97%) ABI and 33 (94%) GRA ($p=0.60$). Oral cavity was identified as the origin of bacteremia in 6 (19%) ABI and 11 (31%) GRA cases ($p=0.23$). Subacute fever was the most frequent symptom: in 21 (75%) ABI cases and 22 (76%) GRA cases ($p=0.94$). 19 (83%) ABI and 18 (95%) GRA ($n=19$) isolates ($p=0.21$) were penicillin sensitive. Penicillin and gentamicin MICs were similar for ABI and GRA isolates ($p=0.46$ and $p=0.67$, respectively). Native IE was reported in 28 (87.5%) ABI and 29 (83%) GRA cases ($p=0.61$). Prosthetic IE was described in 4 (12.5%) ABI and in 5 (14 %) GRA cases ($p=0.83$). Mitral valve was more involved in ABI, 23 (74%) cases, than in GRA, 14 (41%) cases ($p<0.05$). Aortic involvement was present in 9 (29%) ABI and in 16 (47%) GRA cases ($p=0.13$). The main complications and treatment features of ABI and GRA IE are shown in the Table.

Conclusions: IE caused by the GRA and ABI *genera* presents similar clinical features, complication rates and outcomes. Injury of the mitral valve was more frequent with ABI, and congenital heart disease was a risk factor more frequent in GRA. Although the mortality of ABI IE was almost three

times higher, the difference did not reach statistical significance, probably due to the small sample size.

| | ABI (n=32) n (%) | GRA (n=35) n (%) | <i>p</i> |
|--|---------------------|---------------------|----------|
| New onset heart failure | 12 (37.5) | 15 (43) | 0.66 |
| CNS embolism ABI (n=28), GRA (n=29) | 5 (18) | 3 (10) | 0.42 |
| Systemic embolism ABI (n=28), GRA (n=29) | 4 (14) | 3 (10) | 0.65 |
| Combination therapy (Beta-lactam or vancomycin plus gentamicin) ABI (n=31), GRA (n=35) | 30 (97) | 31 (89) | 0.20 |
| Therapy duration [days (IQR)] | 42 (31.0-56.0) | 40 (28.0-42.0) | 0.25 |
| Surgery indicated | 22 (69) | 23 (66) | 0.79 |
| Surgical treatment | 19 (59) | 20 (57) | 0.85 |
| Clinical and microbiological cure | 26 (81) | 27 (87) | 0.53 |
| Global mortality | 5 (16) | 2 (6.5) | 0.24 |