MOLECULAR CHARACTERIZATION OF GLYCOPEPTIDE-RESISTANT *Enterococcus faecium* (VREfm) FROM 30 HOSPITALS IN ARGENTINA

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Enterococci (Ent) as a cause of nosocomial infection have become more prevalent over the last 20 years, both in US and in western European countries. Moreover, strains of Ent have acquired resistance to almost all antimicrobial agents, including vancomycin (VAN). The first VREfm clinical isolate in Argentina was detected in 1997. Since then, VREfm have emerged as colonizing or infecting strains in many hospitals (Htals). The aim of the present study was: to determine the activity of alternative antibiotics to VAN; to characterize the genetic determinant of glycopeptides resistance and to investigate the genetic relationship among strains by PFGE. We collected 189 VREfm isolates from 30 Htals since Jan.1997 to Dec. 2000. 125 (66.1%) VREfm were collected from 20 Htals in Cap. Fed., 52 (27.5%) from 6 Htals in Bs. As. and 12 (6.4%) from 4 Htals in Cordoba, Santa Fe and Chaco. The strains were from: rectal swab (n/%) (145 /77), urine (17/9), blood (9/5) and other (18/9). Most of the VREfm were isolated from ICU patients (46.5%). The MICs were determinated by agar dilution (NCCLS). *Van* genes were detected by PCR. PFGE was used for molecular typing. The resistance was (%): VAN (100), Teicoplanin (98), Ampicillin (98), Erythromycin (100), Ciprofloxacin (99), Chloramphenicol (CMP) (3.7), Tetracycline (TET) (6.3), Gentamicin (77.2) and Streptomycin (95.8). All, except 3 strains (*vanB*), were genotype *vanA.* For 189 VREfm, *Sma*I-PFGE indicated 35 clonal types. Most of the strains (n:107/56.7%) belongs to the same clonal type 1. VREfm Clone 1 strains were resistant to all the antibiotics tested with the exception of CMP and TET. VREfm Clone 1 represented 52% of strains from Cap. Fed., 73% from Bs. As. and 75% from other cities. Clone 1 was dominant in 17/30 Htals. The increse of the prevalence of VREfm in Argentina could be attributed, at least in part, to the intra and inter-hospital dissemination of VREfm 1 clone.