

MULTIPLE PCR FOR TYPIFICATION OF GLYCOPEPTIDE RESISTANT BACTERIA (GRB) COLONIZATION IN PD PATIENTS

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INTRODUCTION AND OBJETIVES

Recently it has been describe an increase of the incidence of glycopeptide resistant bacteria (GRB) colonization in PD patients. The most frequent isolates include: vancomycin resistant *Enterococcus* (VRE), Methycilin resistant *Staphyloccoccus aureus* (MRSA) and Vancomycin resistant *Stapyloccoccus aureus* (VRSA).

Our aim was to determine the presence GRB colonization in PD patients of our unit (VRE, MRSA and VRSA), to establish their resistant profile and which factors could be related to their presence

METHODS

We studied 30 stable PD patients (19 males; 11 females), 5 CAPD, 25 APD, mean age 52 ys (range 5-82 ys). 42% (n=14) had diabetes.

As GRB related factors we analyze: diabetes, peripheral vascular disease (PVD) and previous antibiotic treatment, admissions and tunnelled vascular access (TVA).

For VRE detection we obtain two samples from anal area and culture in specific media.

For MRSA and SAVR we obtain samples from nose and catheter exit site. Bacteria resistant profile was determine by multyple PCR technique.

RESULTS

Four patients had VRE: 3 diabetics, 2 had severe PVD and admissions with antibiotic treatment in the previous 3 months. 3 had *E. casselifalvus* resistant profile VanC1/VanC2, 1 *E. gallinarum* VanC1.

Four patients had MRSA: all were diabetics, had severe PVD, admissions, antibiotics and 3 had previous TVA. None had VRSA.

BACTERIOLOGICAL STUDIES

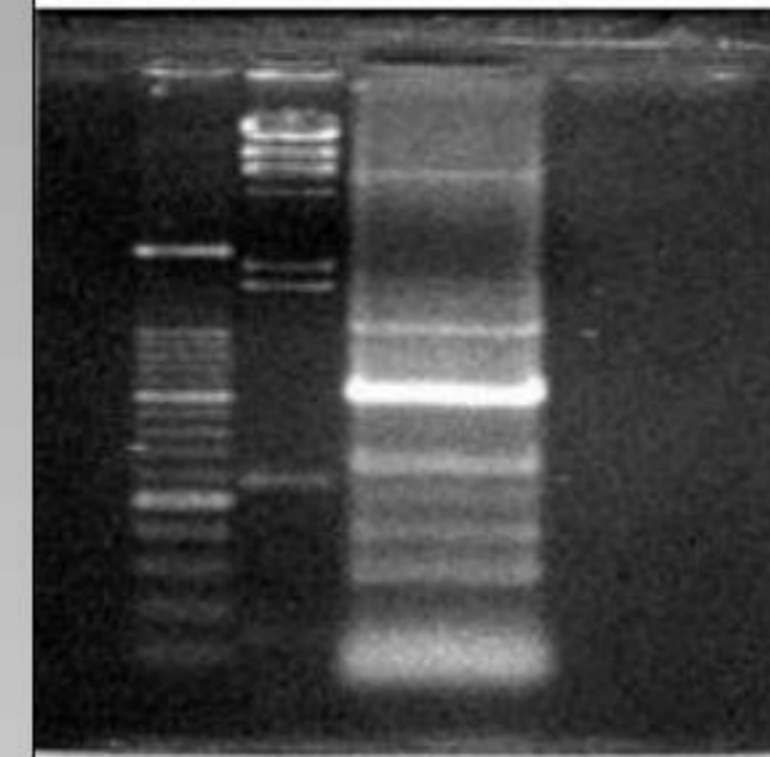
Cultures - colonies



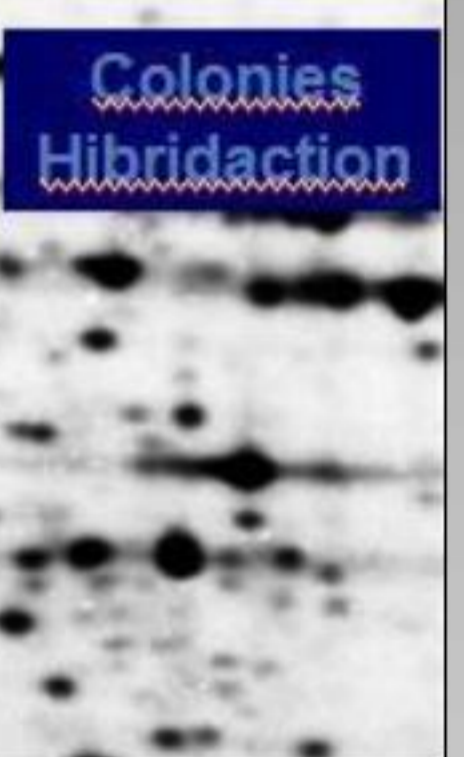
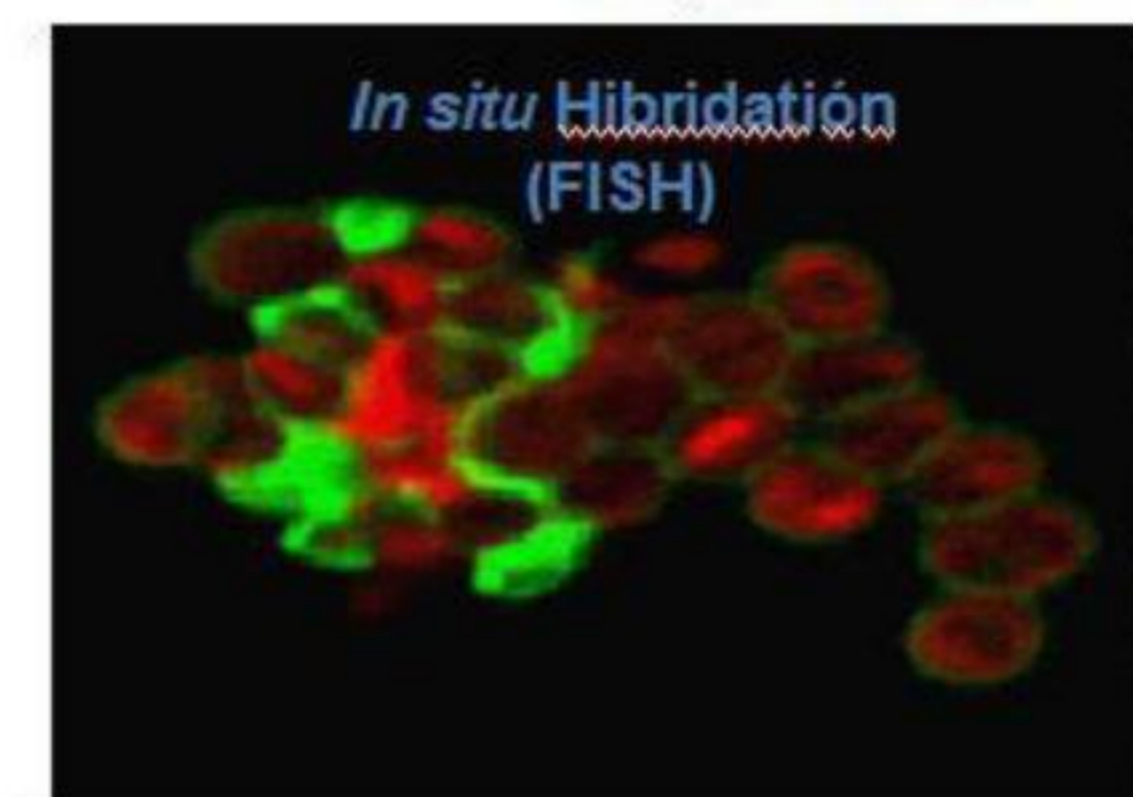
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PCR

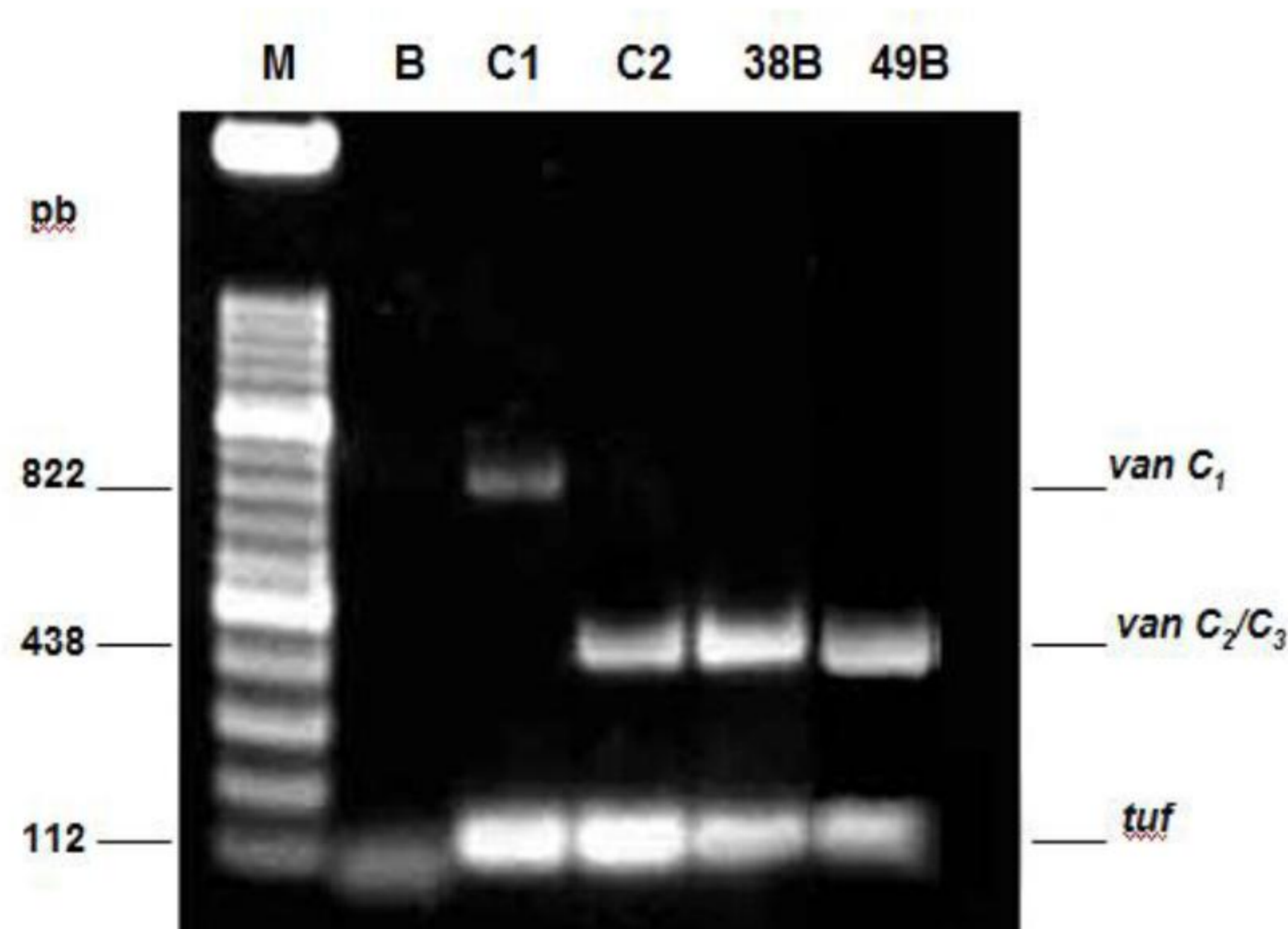


Expression Studies



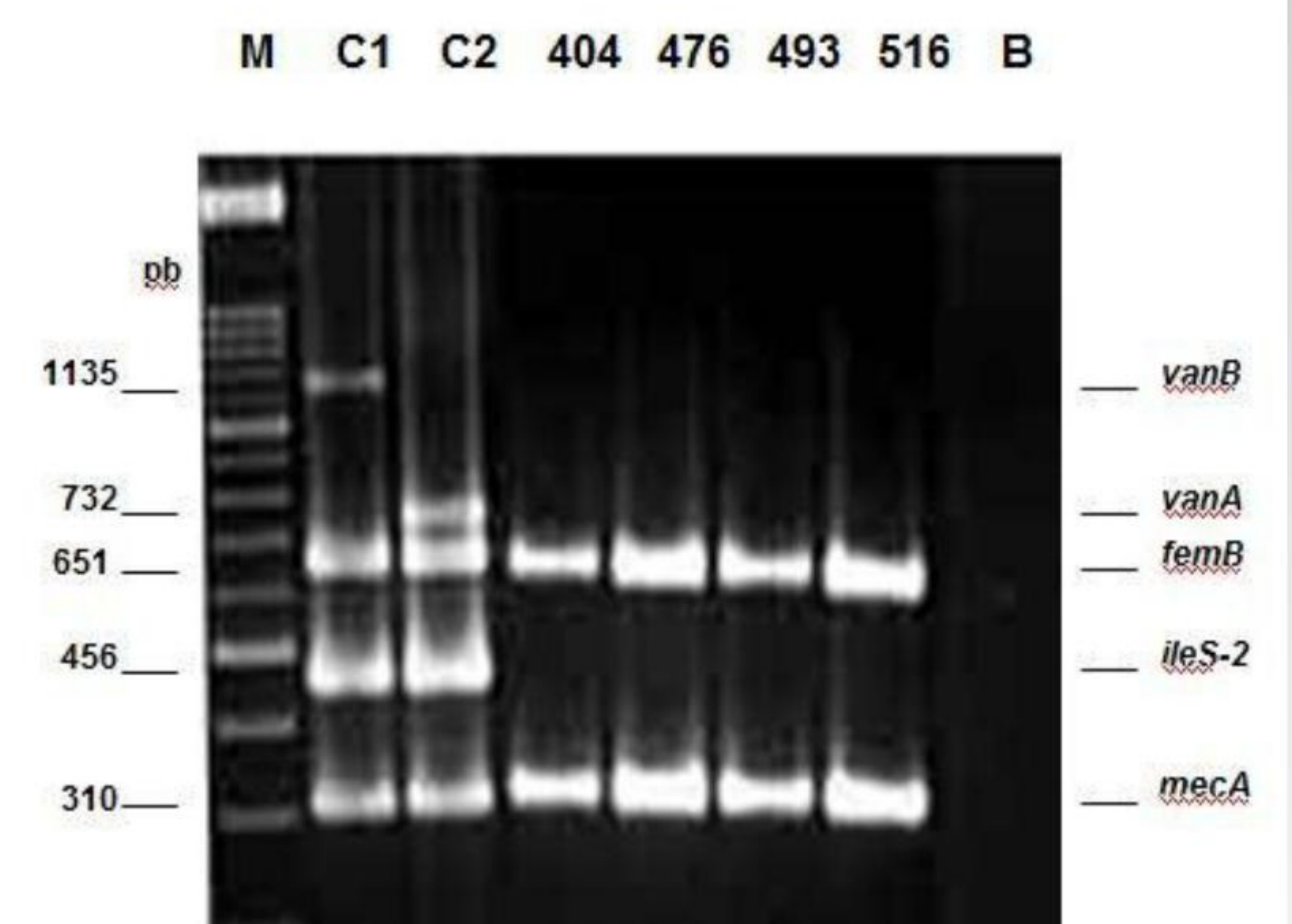
Vancomicin Resistant *Enterococcus*

4 patients;
3 Type 2 DM;
Tunn-Cath;
2 previous ATB



Methicilin Resistant *Staphyloccoccus Aureus*

4 type 2 DM;
3 APD; VPD;
3 Tunn-Cath.
All ATB and
hospitalized



CONCLUSIONS

BRG colonization in our patients were similar to other series and seems to be related with the presence of diabetes, PVD, previous antibiotic treatment and TVA. VRE showed an intrinsic VanC1/VanC2 resistant profile. All SAMR isolates belonged to the same clon. Multyple PCR technique is a very accurate method for a rapid and precise typification of antibiotic resistant profile. We recommend the utilization of molecular methods as a tool for adequate identification of GRB that permits its detection and adequate treatment.

