UNIVERSIDAD AUTÓNOMA DE SAN LUIS POTOSÍ

FACULTAD DE CIENCIAS QUÍMICAS

LABORATORIO DE MICROBIOLOGÍA GENERAL

Enterococcus faecalis bacteremia

Student: Camilo Gonzalez Chavez

Advisors:

-Juana Tovar Oviedo

-Gloria Alejandra Martinez Tovar

Group: 9:00-10:00

Introduction

- Bacteria of the genus Enterococcus have acquired a relevant role in the last two decades, mainly due to the increase in the number of intrahospital cases, representing at present the third cause of nosocomial infection.

- Its prevalence as a nosocomial pathogen has increased due to the selection of these microorganisms in relation to the use of broad spectrum antibiotics with no enterococcal activity.

Characteristics

- Gram positive coccus
- Catalase negative
- No mobility
- Optional Anaerobic
- It can live in extreme environments of pH 9.6 and high concentrations of Salt

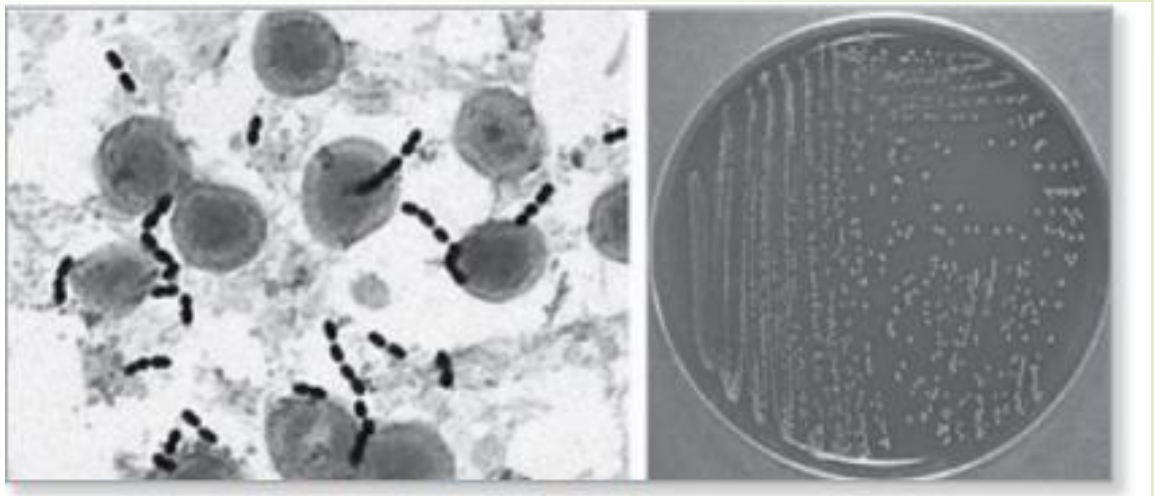

Figura 1. Frotis y cultivo de *Enterococcus faecalis* (1-2).

Methodology

- For the realization of the antibiogram was used the Kirby-Bauer method with a young cultivation of E. faecalis
- A saline dilution was performed at 0.5 on the Mcfarland scale
- An invasive seeding was performed the dilution was placed on Mueller-Hinton agar
- The following antibiotics were placed:

* Gentamicin
* Evofloxacin
* Linezolid
* Vancomycin
* Rifampicin

- It was held for 24 hours at 37 ° C

Results

Antibiotic	Result (diameter)
Gentamicin	Resistant (0 mm)
Evofloxacin	Sensitive(25 mm)
Linezolid	Sensitive(35 mm)
Vancomicin	Resistant (15 mm)
Rifampicin	Intermediate sensitivity (18 mm)

Conclusion

- E. faecalis is becoming increasingly resistant to conventional antibiotics since broad-spectrum antibiotics have been used against this microorganism for a long time.
- The Kirby-Bauer method is the most feasible for sensitivity testing as it is fast and reliable
- From the results of the antibiogram it can be deduced that in vitro the antibiotics of choice would be Evofloxacin, Linezolid and Vancomycin

Bibliography

- Enterococcus faecalis bacterimia, FJ Fernández, J de la Fuente, M. Rubianes, Servicios de Medicina Interna.Complexo Hospitalario Xeral-Cies. Revista Clínica Española 5 de Mayo 2004 [Rev Clin Esp 2004;204:244-50 - Vol. 204 Núm.5] URL: http://www.revclinesp.es/es/bacteriemia-por-enterococcus-faecalis/articulo/13061409/