



The Resistance of Gram Positive Bacteria to Fusidic Acid in Alkharj, Saudi Arabia

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SUMMARY. Fusidic acid is an antimicrobial that is commonly used to manage infections caused by *Staphylococcus aureus*. Inappropriate use of topical antibiotics may lead to the appearance of infections caused by resistant bacteria. This study is a retrospective analysis of bacteria cultures in the laboratory of a public hospital in Alkharj and analysis of the prescriptions in the outpatient settings in 2017 and 2018. In 2017 there were 877 different fusidic acid dosage forms prescribed in 2017 and 1021 dosage forms prescribed in 2018. The resistance rate is very high (100 %) for *Enterococcus faecalis*, and low for *S. aureus* (37.5 %) and *MRSA* (25 %). The excess use of fusidic acid leads to an increase in the rate of bacterial resistance. It is important to use it wisely by implementing an antimicrobial stewardship program.

RESUMEN. El ácido fusídico es un antimicrobiano que se usa comúnmente para controlar las infecciones causadas por *Staphylococcus aureus*. El uso inapropiado de antibióticos tópicos puede provocar la aparición de infecciones causadas por bacterias resistentes. Este estudio es un análisis retrospectivo de cultivos de bacterias en el laboratorio de un hospital público en Alkharj y un análisis de las recetas en pacientes ambulatorios en 2017 y 2018. Se prescribieron 877 formas de dosificación de ácido fusídico diferentes en 2017 y 1021 formas de dosificación prescritas en 2018. La tasa de resistencia es muy alta (100%) para *Enterococcus faecalis* y baja para *S. aureus* (37.5%) y *MRSA* (25%). El uso excesivo de ácido fusídico conduce a un aumento en la tasa de resistencia bacteriana. Es importante usarlo sabiamente mediante la implementación de un programa de administración de antimicrobianos.

KEY WORDS: bacterial resistance, fusidic acid, outpatient, use.

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