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## Abstract

This study investigated the activity of tetracycline against specific bacterial species isolated from different clinical specimens in the period from August to October 2003. These specimens were cultured on enriched, and selective media. The isolates were identified as *E. coli* (n = 10), *Proteus* spp. (n = 10) *salmonella* spp. (n = 10), *Shigella* spp. (n = 10) and *Klebsiella* spp. (n = 10).

All isolate were studied for their susceptibility to tetracycline using the disk diffusion method on Mueller Hinton agar and serial dilution.

The results indicated that the rate of resistance was 68% and the minimum inhibitory concentrations (MICs) were determined for each isolate and was found to be as follows: (mg/ml) *E. coli* > 30, *Shigella* spp. > 30, *Klebsiella* spp.  $\leq 30$  to  $\geq 7.5$ , *Proteus* spp. >30 and *salmonella* spp.  $\leq 30$  to  $\geq 15$ .

# الخلاصة

أجريت هذه الدراسة لاستقصاء فعالية التتراسيكلين كمضاد حيوي فعال ضد سلالات معينة من البكتيريا عزلت من عينات مختلفة في الفترة من أغسطس إلى أكتوبر 2003م.

هذه العينات زرعت في أوساط غذائية مختلفة. تم عزل هذه السلالات والتعرف عليها و كانت كالاتي: الاشريكية القولونية (10 سلالات)، الشجيات (10 سلالات)، المتقلبات (10 سلالات)، الكلبسيه (10 سلالات)، و السالمونيلا (10 سلالات).

جميع السلالات المعزولة درست من حيث حساسيتها للتتراسيكلين وذلك بإجراء تجربة الحساسية بطريقة الانتشار من الأقراص على وسط مولر هنتون، وطريقة التخفيف المتسلسل لتحديد التركيز المثبط الأدنى للمضاد الحيوي.

أثبتت النتائج أن نسبة مقاومة السلالات المعزولة للتتراسيكلين (68%) ونسبة التركيز المثبط الأدنى كانت كالاتي:

سلالة الاشريكية القولونية	$30 < \text{mg/ml}$
سلالة الشجيات	$30 < \text{mg/ml}$
سلالات المتقلبات	$30 < \text{mg/ml}$
سلالة الكلبسيلا	من 7.5 إلى $30 \text{ mg/ml} \geq$
سلالة السالمونيلا	من 15 إلى $30 \text{ mg/ml} \geq$

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