

الآية

بسم الله الرحمن الرحيم

قال تعالى:

وَيَسْأَلُونَكَ عَنِ الرُّوحِ قُلِ الرُّوحُ مِنْ أَمْرِ رَبِّي وَمَا أُوتِيتُمْ مِنَ الْعِلْمِ إِلَّا قَلِيلًا

صدق الله العظيم

سورة الإسراء الآية 85

Dedication

To those giving me the true meaning of love and live.

My parents..

To my lovely brothers...

To those who sharing my happiness.. sadness.. and dreams..
until the dream has become true..

Friends..

To those who dedicate their lives for our future..

My teachers...

Acknowledgment

All thanks and praise to Allah the worthy of all praise for all that I am..

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All thanks for every one who helps me some how in this work.

Abstract

Gastroenteritis is one of the serious health problems worldwide. *Escherichia coli* is the leading organism among the causative agents of gastroenteritis.

The objective of this study was to isolate, identify and serotype *Escherichia coli* from patients with gastroenteritis.

A total of 100 stool specimens were collected from patients attended Military Hospital and Mohammed Alamen Hamed Hospital For Pediatric, Omdorman. The specimens were cultivated on bacteriological culture media for primary isolation of the pathogen. *E. coli* was identified by Gram's stain and biochemical tests. Serotyping for compliment cultural findings was done by slide agglutination of heat treated organisms method to detect enteropathogenic *E. coli*.

The result revealed that 87 (87%) *E. coli* were isolated from the hundred specimens. 33 (38%) of the isolates were EPEC. Out of them, 23 (70%) of these were poly 2-serogroup and 10 (30%) were poly 3-serogroup.

The study concluded that EPEC serotype was the main causative agent of gastroenteritis in children than in adult. Further studies are needed to confirm the present result as well as using monovalent antisera for specific serotyping.

المستخلص

التهاب المعدة والأمعاء هي واحدة من المشاكل الصحية الخطيرة في العالم. الإشريكية القولونية تعتبر المسبب الرئيسي ضمن مسببات التهاب المعدة والأمعاء.

جمعت مائة عينة براز من مرضى حضروا لمستشفى السلاح الطبي ومستشفى محمد الأمين حامد للأطفال امدمان. جميع العينات استزرعت في أوساط تزرع بكتيريولوجية للعزل الأولي. تم التعرف على الإشريكية القولونية بواسطة صبغه جرام و الاختبارات الكيموحيوية. تم عمل التتميط المصلي بطريقه التجمع في الشريحة الزجاجية للكائنات الحية المعالجه حراريا.

أظهرت النتيجة أن 87 (87%) اشريكية قولونية عزلت من المائه عينه. 33 (38%) من الاشريكية القولونية المعزولة كانت اشريكية قولونية ممرضة. منها 23 (70%) من مجموعه المتعدد المصلي-2 و 10 (30%) من مجموعه المتعدد المصلي-3.

خلصت الدراسة إلى أن الاشريكية القولونية الممرضة توجد عند الأطفال أكثر من البالغين. وأن دراسة إضافية مطلوبة لتأكيد نتيجة الدراسة الحالية باستخدام أمصال أحادية التكافؤ للتتميط المصلي الدقيق.

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