

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

الآية

قال تعالى :

رَبِّ قَدْ آتَيْتَنِي مِنَ الْمُلْكِ وَعَلَّمْتَنِي مِنْ تَأْوِيلِ الْأَحَادِيثِ ۚ فَاطِرَ السَّمَاوَاتِ

وَالْأَرْضِ أَنْتَ وَلِيِّي فِي الدُّنْيَا وَالْآخِرَةِ ۖ تَوَفَّنِي مُسْلِمًا وَأَلْحِقْنِي بِالصَّالِحِينَ

صدق الله العظيم

سورة يوسف الآية 101

Dedication

I dedicate this work...

To my parents...

To my husband who encouraged me to perform this
work...

To my sisters... and all those who helped me to achieve this
work...

Acknowledgement

First of all my thanks to ALLAH

I wish to express my great thanks and gratitude to my supervisor Dr. Mohammed Bha Alddin for his close supervision and assistance to accomplish this work ...

I also thanks every one supported and helped me in completing this research...

Staff of parasitology and medical entomology department in Sudan University of science and technology...

Staff of graduate studies faculty in Sudan University of science and technology ...

Hospital staff of radiation and isotope centre in Khartoum...

ملخص الدراسة

أجريت هذه الدراسة في المركز القومي للعلاج بالأشعة والطب النووي في ولاية الخرطوم, حيث جمعت عينات البراز من خمسون مريضاً " مصابون بمرض سرطان الدم وأنواع السرطان الأخرى.

تم اختبار هذه العينات لاكتشاف الاصابه بطفيليات الكوكسيديا المعويه عن طريق اعداد العينه الرطبه, تركيز عينة البراز بمادتي الفورمالين والايثر وصبغ مسحة البراز بصبغة زيهل نلسون المعدله. أظهرت النتائج ان خمسه (10%) من المرضى مصابون بطفيليات الكوكسيديا المعويه.

أظهرت الدراسة أن معدل انتشار الكربتوسبورidium بارفم (8%) وجد أعلى من معدل انتشار الأيسوسبوريا بللاي (2%) في مرضى ضعف الجهاز المناعي.

أظهرت الدراسة أن معدل انتشار الكربتوسبورidium في الذكور (8%) والانات (8%) متساوي, كما أن معدل انتشار الأيسوسبوريا في الذكور (4%) أعلى من المرضى الأنثى (0%).

أعلى معدل انتشار للكربتوسبورidium (20%) والأيسوسبوريا (10%) قد سجل في الفئه العمرية من 16-25 , كما أن أقل معدل (0.0) قد سجل ضمن الفئات العمرية أقل من 15 وأعلى من 45 بالنسبه للكربتوسبورidium وباقي الأعمار بالنسبه للأيسوسبوريا.

أوضحت الدراسة أن معدل انتشار الكربتوسبورidium كان 12% و 0.0% ضمن المرضى المصابون بأنواع السرطان الأخرى غير سرطان الدم و المرضى المصابون بسرطان الدم على التوالي. برغم أن معدل انتشار الأيسوسبوريا 6% و 0.0% ضمن المرضى المصابون بسرطان الدم والمرضى المصابون بأنواع السرطان الأخرى غير سرطان الدم على التوالي.

أظهرت الدراسة أن معدل الدقه و الحساسيه لتركيز عينة البراز بمادتي الفورمالين والايثر كان 100% و 60% على التوالي, أما معدل الدقه و الحساسيه لصبغة زيهل نلسون المعدله كان 95.7% و 100% على التوالي.

Abstract

This study was conducted in radiation-isotope centre (RICK) in Khartoum state, where stool samples were taken from 50 patients presented with leukemia and cancer other than leukemia.

Stool samples were examined for the presence of intestinal coccidian parasites by direct wet preparation, formal ether concentration technique and modified ZN staining technique. The results showed that 5 (10%) of the presented patients have intestinal coccidian parasites.

The study demonstrated that the prevalence rate of *C. parvum* (8%) was found higher than the rate of *I. belli* (2%) in immunocompromised patients.

The study revealed that the prevalence rate of *C. parvum* among males (8%) and females (8%) was equal, and the prevalence rate of *I. belli* among males patients (4%) was higher than female patients (0%).

The highest prevalence rate of *C. parvum* (20%) and *I. belli* (10%) was reported among the 16-25 years age group, while the lowest (0.0%) was reported among the below 15 and above 45 years age groups for *C. parvum* and the rest of the groups for *I. belli*.

The result showed that the prevalence rates of *C. parvum* were 12 % and 0 % among the patients of cancer other than leukemia and patients of leukemia respectively. However, the prevalence rates of *I. belli* were 6 % and 0 % among the leukemia, and cancer other than leukemia patients respectively.

The study revealed that the sensitivity and specificity rates of the formal ether concentration technique were 60% and 100% respectively, while the

sensitivity and specificity rates for the modified ZN staining technique were 100% and 95.7% respectively.

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