

قال الله تعالى

وَقُلْ اَعْمَلُوا فَسَيَرَى اللَّهُ عَمَلَكُمْ وَرَسُولُهُ
وَالْمُؤْمِنُونَ وَسَتُرَدُّونَ اِلَى عَالِمِ الْغَيْبِ وَالشَّهَادَةِ
فَيُنَبِّئُكُمْ بِمَا كُنْتُمْ تَعْمَلُونَ

صدق الله العظيم

سورة التوبة الآية 105

Dedication

To my parents whose love and support are given generously.

To the rest of my family and friends.

To all those who provided moral support and those who gave me a helping hand in any day of my life.

Acknowledgement

I would like to express my deep appreciation and gratitude to my supervisor Dr. Mohamed Baha Eldin for his valuable suggestion and guidance throughout the period of the study. Without his sincere help, this work could not have been established.

I am also grateful to Mr. Osama kobara and his staff in Bashair teaching hospital laboratory for facilities provided in the laboratory.

Abstract

The study was conducted in Mayo area at Khartoum state, which is located about 11 kilometers far from the city center.

The main aim of the study was to investigate the distribution of *T.vaginalis* among females in Bashair teaching hospital.

The study employed 445 females of different age groups to investigate the presence of *T.vaginalis*. This was done through the examination of females' urine using wet preparation and stain smear.

The study showed that *T.vaginalis* was prevalent among 8.8% of the females examined. The high prevalence (10%) was reported among the married females, while 1.7% prevalence rate was reported among the singles. The highest infection rate (11.2%) was found in the age group 31 – 40 years, while the lowest infection rate (3.2%) was found in the age group over 40 years.

The study, also, showed that the highest percentage of infection was among the Barno tribes (19%), while the lowest percentage of infection was among the fur tribes (3.8%).

ملخص البحث

اجريت هذه الدراسه فى منطقة مايو فى ولأية الخرطوم التى تبعد حوالى 11 كيلومتر من وسط المدينه .

الهدف من هذه الدراسه هو ايجاد معدل انتشار طفيل المشعريه المهبليه .

وسط الأنث فى مستشفى بشاير التعليمي

اجريت هذه الدراسه على عدد 445 من الأنث من فئات عمریه مختلفه .

للتأكد من وجود طفيل المشعريه المهبليه

تمت وذلك عن طريق فحص البول للأنث وذلك باستعمال تقنية التحضير الرطب والتحضير الجاف مع صبغة الجيمسا .

اوضحت الدراسه ان معدل انتشار طفيل المشعريه المهبليه هو 8.8% من المجموع الكلى

أعلى نسبة انتشار (10%) وجدت وسط المتزوجات حيث ان اقل نسبة انتشار (1.7%) وجدت بين الغير متزوجات

اعلى نسبة اصابه (11.2%) وجدت فى المجموعه العمریه 31 – 40 سنه .

حيث ان اقل معدل اصابه وجد فى الفئه العمریه فوق ال 40 عاما

اوضحت الدراسه كذلك ان اعلى نسبة اصابه وجدت بين نساء قبائل البرنو (%19) حيث ان اقل نسبة اصابه وجدت بين نساء قبائل الفور (3.8).

Contents

		page
	الأية الكريمه	I
	Dedication	II
	Acknowledgement	III
	Abstract in English	IV
	Abstract in Arabic	V
	List of contents	VI
	List of tables	VIII
	List of figures	IX
	Chapter one	
	Introduction and literature review	1
1.1	Classification of <i>Trichomonas vaginalis</i>	1
1.2	Historical background	2
1.3	Morphology	2
1.4	Life cycle	3
1.5	Mode of transmission	4
1.6	Global epidemiology and distribution of <i>Trichomonas vaginalis</i>	4
1.7	<i>Trichomonas vaginalis</i> in Sudan	6
1.8	Pathology and pathogenesis	8
1.9	Clinical pictures	9
1.10	Diagnosis of <i>Trichomonas vaginalis</i>	10
1.10.1	Microscopy	10
1.10.1.1	Wet preparations	10
1.10.1.2	Staining methods	11
1.10.1.2.1	Giemsa stain test	11
1.10.1.2.2	Papanicolaou test (Pap smear)	11
1.10.1.3	Culture	11
1.10.1.3.1	Broth culture	12
1.10.1.3.2	Culture/InPouch™ TV (BioMed Diagnostics)	12
1.10.1.4	Affirm™ VPIII Microbial Identification Test (BD)	12
1.10.1.5	OSOM® Trichomonas Rapid Test (Genzyme Diagnostics)	12
1.10.1.6	Polymerase chain reaction (PCR)	13
1.10.1.7	Potassium hydroxide (KOH) "whiff test"	13
1.10.1.8	Vaginal pH test	13
	Objectives	17
	Chapter two	
	Materials and method	18

2.1	Study design	18
2.2	Study area	18
2.3	Study population	18
2.4	Data collection	18
2.5	Sampling	18
2.6	Techniques used	19
2.6.1	Wet smear	19
2.6.2.	Giemsa stain smear	19
2.6.2.1	Preparation of Giemsa stain	19
2.6.2.2	Staining procedure	19
2.7	Data analysis	19
	Chapter three	
	Results	20
	Chapter four	
	Discussion	25
	Conclusions	27
	Recommendations	27
	References	28
	Appendix	33

List of tables

		page
Table 1	The overall prevalence of <i>T.vaginalis</i> among females.	21
Table 2	The prevalence of <i>T.vaginalis</i> according to age among females.	21
Table 3	The prevalence of <i>T.vaginalis</i> according to marital status among females.	23
Table 4	The prevalence of <i>T.vaginalis</i> according to tribe among females.	24

List of figures

		page
Figure 1	Morphology of <i>T.vaginalis</i>	14
Figure 2	Life cycle of <i>T.vaginalis</i>	15
Figure 3	<i>T. vaginalis</i> stained with Giemsa stain	16
Figure 4	The prevalence of <i>T.vaginalis</i> according to age among females.	22
Figure 5	The prevalence of <i>T.vaginalis</i> according to marital status among females	23
Figure 6	The prevalence of <i>T.vaginalis</i> according to tribe among females	24