

Cestodes Infestation in Infants and Children

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By

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TABLE OF CONTENTS

Title	Page
ACKNOWLEDGMENTS	i
TABLE OF CONTENTS	ii
LIST OF ABBREVIATIONS	vii
LIST OF FIGURES	ix
LIST OF TABLES	ix
 INTRODUCTION AND AIM OF ESSAY	 1
 CHAPTER (1) CESTODES	 3
Introduction and historical perspective	3
Definition	4
Classification	4
Morphology	5
Adult	5
Eggs	7
Life cycle	9
Epidemiology and Transmission	11
Clinical manifestation	12
Immunology	13
Diagnosis	14
Treatment	15
Prevention and control	18
 CHAPTER (2) TAENIASIS	 19
INTRODUCTION	19
TAENIA SAGINATA	20
Definition	20
Morphology	20
Adult	20

Eggs	22
Cysticerci	22
Life cycle	23
Epidemiology and Transmission.	25
Clinical Manifestation and Pathology	25
Diagnosis	26
Treatment	28
Prevention and control	28
ASIAN TAENIA	29
Definition	29
Morphology	29
Adult	29
Eggs	30
Cysticerci	30
Life cycle	30
Epidemiology and Transmission.	30
Clinical Manifestation and Pathology	31
Diagnosis	31
Treatment	31
Prevention and control	31
Taenia Solium	32
Definition	32
Morphology	33
Adult	33
Eggs	34
Cysticerci	35
Life cycle	35
Epidemiology and Transmission.	36
Clinical Manifestation and Pathology	37
Diagnosis	37
Treatment	39
Prevention and control	40

Cysticercosis	40
Introduction and History	40
Definition	41
Morphology	41
Cysticerci	41
Life cycle	41
Epidemiology and Transmission.	42
Location in the host	43
Pathogenesis	44
Clinical Manifestation	46
Diagnosis	50
Treatment	54
Prevention and control	56
 CHAPTER (3) DIPHYLLOBOTHRiasi	 59
Introduction	59
Definition	59
Morphology	60
Adult	60
Eggs	62
Life cycle	63
Epidemiology and Transmission.	65
Clinical Manifestation and Pathology	65
Diagnosis	67
Treatment	68
Prevention and control	69
 CHAPTER (4) ECHINOCOCCOSIS	 71
INTRODUCTION	71
Definition	71
Morphology	72
Adult	72
Eggs	73

Cysts	73
Life cycle	76
Epidemiology and Transmission.	78
Clinical Manifestation and Pathology	80
Diagnosis	88
Treatment	92
Prevention and control	93
 CHAPTER (5) HYMENOLEPIASIS	 95
INTRODUCTION	95
HYMENOLEPIS NANA	95
Definition	95
Morphology	96
Adult	96
Eggs	97
Cysticercoid larva	98
Life cycle	98
Epidemiology and Transmission.	100
Clinical Manifestation and Pathology	100
Diagnosis	102
Treatment	102
Prevention and control	102
HYMENOLEPIS DIMINUTA	103
Definition	103
Morphology	103
Adult	103
Eggs	104
Life cycle	105
Epidemiology and Transmission.	106
Clinical Manifestation and Pathology	107
Diagnosis	107
Treatment	107
Prevention and control	107

CHAPTER (6) DIPYLIDIUM CANINUM	109
Definition	109
Morphology	110
Adult	110
Eggs	112
Life cycle	112
Epidemiology and Transmission.	113
Clinical Picture	114
Diagnosis	114
Treatment	114
Prevention	114
 SUMMARY AND CONCLUSION	 116
 REFERENCES	 124

LIST OF ABBREVIATIONS

BESS-T base	Base Excision Sequence Scanning Thymine-base
C_{Ag}	Circulating antigen
CE	Cystic Echinococcosis
CHD	Cystic hydatid disease
CNS	Central Nervous System
CSF	Cerebrospinal fluid
CT	Computerized tomography
D. Caninum	Dipylidium Caninum
D. Latum	Diphyllobothrium Latum
DNA	Deoxyribo nucleic acid
EITB	Electroimmunotransfer blot
ELISA	Enzyme linked immunosorbent assay
FNAB	Fine needle aspiration biopsy
HCF	Hydatid cyst fluid
H. Diminuta	Hymenolepis diminuta
H. Nana	Hymenolepis nana
ICP	Intracranial pressure
IgG	Immunoglobulin G
IgE	Immunoglobulin E
IL	Interleukin
MRI	Magnetic Resonance Imaging
NCC	Neurocysticercosis
PCR	Polymerase Chain Reaction
PCR-REA	PCR with restriction enzyme analysis
SC	Subcutaneous
SP	Substance P
Spp	Species
SSCP	Single-Strand Conformation Polymorphism
T	Taenia

T.asiatica	Taenia asiatica
Th	T-helper
T.saginata	Taenia saginata
T.solium	Taenia solium
U.S.	Ultrasonography

LIST OF FIGURES

Figure	Page
Figure (1.1) The organization of an adult tapeworm (Based on taenia)	6
Figure (1.2) Gravid proglottids (1) Taenia saginata (2) Taenia solium (3) D. latum (4) D. Caninum	7
Figure (1.3) Representative tapeworm eggs (not to scale): a) Hymenolopid b) Taeniid c) Diphyllbothrium d) D. Caninum	9
Figure (2.1) Mature proglottids of Taenia spp.	21
Figure (2.2) Taenia egg	22
Figure (2.3) Life cycle of Taenia spp.	24
Figure (2.4) Diagnostic features of T.saginata and T.solium (a) Genital atria (b) Gravid proglottids	27
Figure (2.5) Adult Taenia solium	33
Figure (2.6) Anterior region of Taenia solium showing the scolex and neck region and the proglottids on the right are immature.	34
Figure (2.7) (a) A cysticercus of taenia (*) the	35

scolex within the large bladder.	
Figure (2.7) (b) A cysticercus of taenia in muscle. Note the fibrous capsule (*) around the cysticercus.	35
Figure (3.1) Adult D. Latum	60
Figure (3.2) Scolex of Diphyllbothrium latum	61
Figure (3.3) Mature proglottids of D. latum	62
Figure (3.4) Diphyllbothrium latum egg	62
Figure (3.5) Cyclope	63
Figure (3.6) Life cycle of D. latum	64
Figure (4.1) Adult worm of Echinococcus granulosus (the left one is diagram).	72
Figure (4.2) Eggs of Echinococcus granulosus.	73
Figure (4.3) Echinococcus granulosus hydatid cyst. (A) Diagram of unilocular cyst (limiting membrane) (B) diagram of single immature worm, (C) diagram of hooklets, (D) diagram of laminated layers, daughters, cysts, and scolices	75

Figure (4.4) A section of a hydatid cyst at low power. The cyst consists of a thick outer layer (*), several thinner internal layers, and many protoscolices. The protoscolices are often called "hydatid sand."	75
Figure (4.5) Life cycle of <i>Echinococcus granulosus</i> .	77
Figure (4.6) A hydatid cyst (*) in the cranium of a child (the ruler at the top measures 6 inches long, and the child's brain is below the hydatid cyst). This infection resulted in the child's death.	81
Figure (5.1) Adult <i>Hymenolepis nana</i>	96
Figure (5.2) Scolex of <i>H. nana</i> (*) 2 suckers from four	97
Figure (5.3) <i>Hymenolepis nana</i> egg	97
Figure (5.4) Histological section showing a cysticercoid (*) of <i>H. nana</i> developing in the small intestine.	98
Figure (5.5) <i>Hymenolepis nana</i> diagram of both cysticercoid and adult worm in the small intestine	101

(From Garcia 2001).

Figure (5.6) Immature and mature proglottids of <i>H. diminuta</i> .	104
Figure (5.7) <i>Hymenolepis diminuta</i> egg.	104,105
Figure (5.8) <i>H. diminuta</i> cysticercoid recovered from an infected beetle.	106
Figure (6.1) Immature proglottids of <i>D.</i> <i>Caninum</i> .	109
Figure (6.2) Scolex of <i>D. Caninum</i> .	110
Figure (6.3) Proglottids of <i>D. Caninum</i> compared to a paper match when the proglottids dry, their appearance is similar to grains of rice.	111
Figure (6.4) Gravid proglottids of <i>D.</i> <i>Caninum</i> .	111
Figure (6.5) Egg packets of <i>D. Caninum</i> .	112
Figure (6.6) Life cycle of <i>D. Caninum</i> .	113

LIST OF TABLES

Table	Page
Table (1.1) Therapy for intestinal cestodes (Tapeworm) infection	18
Table (6.1) Cestodes parasites (intestinal)	115

INTRODUCTION

Cestodes are long segmented worms which lack an intestinal tract and, instead, are able to absorb nutrients through their integument. The adult worm consists of a head (scolex), which attaches to the mucosa of the intestine, a neck, and a segmented body where both male and female gonads (proglottids) are found. **(Blanton,2004)**

Typically, Cestode requires one or more intermediate hosts in its life cycle. Eggs are passed into the environment from the primary host. An intermediate host ingests the fertile eggs, and they hatch inside of this second host. Next the larvae enter the tissues and encysted. Finally the primary host ingests the cysts by ingesting the flesh of the intermediate host. **(Schantz,1996)**

In most cestode infestations (e.g. Taenia Solium, Taenia Saginata, and Hymenolepis nana), humans are the primary host, adults worms survive inside their human hosts, where they are limited to the intestinal tract. In the remaining cestodes (e.g. Echinococcus) humans function as the intermediate hosts. Larvae exist within the tissues and migrate through different organ systems. **(Samuel Bu, Barry M., 1998)**

Many Cestode infestations are asymptomatic. However, once symptoms occur, they are usually vague gastrointestinal complaints of abdominal pain, anorexia, weight loss, or malaise. Some of the more serious infestations result in symptoms from mass effects on vital organs, inflammatory responses, nutritional deficiencies and the potential of fatal anaphylaxis. **(Knoben JE, Anderson PO, 1995)**