



كلية الرشيد الجامعة

قسم تقنيات المختبرات الطبية

الطفيليات الطبية

Helminthes

المرحلة الثانية – النظري

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Helminthes

Introducion

Helminthes are trophoblastic metazoa (multi-cellular organisms). Helminthes are among the common parasitic causes of human suffering.

They are the cause of high morbidity and mortality of people worldwide.

They cause different diseases in humans, but few helminthic infections cause life-threatening diseases.

They cause anemia and malnutrition. In children they cause a reduction in academic performance. Helminthes also cause economic loss as a result of infections of domestic animals.

The sources of the parasites are different. Exposure of humans to the parasites

may occur in one of the following ways:

1. Contaminated soil (Geo-helminthes), water (cercariae of blood flukes) and food (Taenia in raw meat).

2. Blood sucking insects or arthropods (as in filarial worms).
3. Domestic or wild animals harboring the parasite (as in echinococcus in dogs).
4. Person to person (as in *Enterobius vermicularis*, *Hymenolopis nana*).
5. Oneself (auto-infection) as in *Enterobius vermicularis*.

They enter the body through different routes including: mouth, skin and the respiratory tract by means of inhalation of airborne eggs.

The helminthes are classified into three major groups. These are:

1. Trematodes (Flukes)
2. Nematodes (Round worms)
3. Cestodes (Tape worms)

The Trematodes and Cestodes are groups of flat worms.

Cestodes Vs Trematodes Vs Nematodes

Differences between Cestodes, Trematodes & Nematodes			
	CESTODES	TREMATODES	NEMATODES
Shape	Tape like segmented	Leaf like unsegmented	Elongated, cylindrical, unsegmented
Sexes	Sexes not separate Monoecious Hermaphrodite	Sexes not separate Monoecious except Schistosoma	Sexes are separate Diecious
Head end	Suckers, often with hooks	Suckers, no hooks	No suckers, no hooks, well developed
Alimentary canal	Absent	Present, incomplete, no anus	Present, complete, anus present
Body cavity	Absent	Absent	Present