

ESKİŞEHİR BRANCH OF SOCIETY OF RAILWAY PERSONEL WHO HELPED TO PRINT OUR
PAMPHLET

EROL BÜYÜKMERİÇ, NİHAL DOĞAN, YURDANUR AKGÜN, AZİTA EKENEL

Anadolu University Department of Graphic Students (Atilla Erdoğan; Ayşe Demir; Elvan Aslan;
Gonca Tanrıseven; H. Zehra Saydam; Ömer Naim Odabaş; Seçil Ersezer; Şirin Benuğur; Vildan Birer)
ETAM Ltd. Printing Company, Eskişehir, Turkey

"The health and well-being of the Turk citizen must be undertaken as an important national problem."

M. Kemal ATATÜRK

"The science of parasitology, is not only a section of science and general medicine, but is an issue which is closely related to us due to prevention and institution of medical facilities for the masses."

Prof.Dr. Hasan Şükrü OYTUN

"In the first fifty years of the Turkish Republic among other medical branches, medical parasitology has been able to bring to attention the problems of our country in the best possible way. Able to enter every area where a microscope can go, this science has identified parasites in even the villages, found the frequency in the community, and enabled physicians to combat them. There is still work to be accomplished. And these are left to physicians working in the next fifty years of the Turkish Republic."

Prof.Dr. Ekrem Kadir UNAT

"Whit the most optimistic view, a country where 40% of it's population has parasites, the necessary organisations must give the needed importance and know the responsibility they have as a natural requisite."

Prof.Dr. Kürşat ALTINBAŞ

"Turkey is not wealthy enough to carry parasite infections."

Prof.Dr. M. Ali ÖZCEL

"The sosyo-economical and cultural standard of a community is shown by the percentage of parasite infections."

Prof.Dr. Yurdanur AKGÜN

"It is a visitor of
housholder
It is a swallower and
it is colder
Who ever has a pale
complexion
It is sure s'he is a
carrier."

Erol BÜYÜKMERİÇ

Introduction

Parasite diseases is a wide spread case in our community. Unfortunately, because our country-men are not fully aware of this chronic and sly foe, they usually carry and feed these parasites a life long. Especially our low-income country-men, are unable to eat a balanced diet, their capacity to fight with these merciless creatures in next to nigh and they are very much broken down by them.

Many parasite research activities carried out by universities in our country show that

our community is living with a large number of various parasites.

Our people, especially our children must be able to use the physical strength within themselves for the betterment and beautification of their lives, not to have this strength stoolen by parasites, this will be the most important pozitive point gained.

For this reason, combating parasitic diseases is a must for preventive medicine, aswell as it being a life long duty of each citizen to take

part in developing human resources.

The diseases caused by parasitic infections

Parasites cause a lot of diseases in humans. First of all the parasite is an exploiter. This selfish commensal takes the needed food from the place it is living in. Therefore a person's life is negatively affected. Some parasites cause a human being's psychological and life balance to be upturned by their secretions and enzymes. Some, due to their mechanical harm can cause a favourable place for infectious microorganisms. And some due to extreme breeding, cause blockages (eg. intestine, bile duct, the blocking of bile to flow to the intestines is also cancerogenic.) Also brain, liver, lung and other damages. Some parasites cause abortion, child death or handicapped birth in pregnant women. And about all of them lower the body's defense mechanisms, thereby opening the way for various diseases.

Parasite infections occur in nearly all parts of the world, the geographical properties of the country, the socio-economical and cultural status of the people, the parasite type and the ability to infect from person to person all cause different spreading and intensity percentages.

The parasites cause anemia, asthma, epidermal inflammatory diseases, pneumonia, heart, kidney failure, diarrhea, intestinal obstruction, urinary system diseases, genital organ ulceration, allergic problems in the body, mind, psychological under development of children, as well as causing the immune system to be negatively affected.

The general symptoms of parasites; appetite problems, developmental problems, fever, changes in the pulse, problems with the nervous system, inability to adapt to the environment, skin and mucosal eruptions, joint pain, negative changes in the blood, night urination, diarrhea, constipation, foul smelling feces, sleeping problems, nose scratch, salivation, teeth bleeding, anus scratching, stomach bloating, stomach pain, weight loss, exhaustion, nausea, vomiting, nose congestion and working problems with the organ where the parasite is situated.

Diagnosis: Diagnosis of parasite diseases, according to the general symptoms; blood, feces,

urine, skin, sputum, stomach secretion or tissues are investigated.

Treatment: After diagnosis the appropriate medicine to relieve symptoms and kill the parasite is given. After treatment parasite control must be done to define the treatment's success.

Prevention : Personal and environmental cleanliness and appropriate education.

The most common intestine parasites of the Eskişehir region

1- Giardia Lamblia

In the world and in our country a common parasite. It spreads via dirty water and food. Its location is the small intestine; sometimes the bile duct. Especially in children recurrent diarrhea, stomach ache, oily and foul smelling feces, weight loss and development retardation is observed. Diagnosis; cysts or trophozooids are searched under the microscope in the feces and duodenal aspirate, and if found, diagnosis is definite. With medication health can be regained but controls must be done. Prevention; personal and environmental hygiene and education are the most important factors.

2- Entamoeba coli

Found everywhere in the world in human intestines and under normal conditions is not a pathogenic parasite. Cyst and trophozooid forms are found in human intestines. It is usually seen in people who do not regulate hygienic rules enough. Treatment is unnecessary. The importance of this parasite is that it is similar to *E. histolytica* and leads to false identification in feces testing.

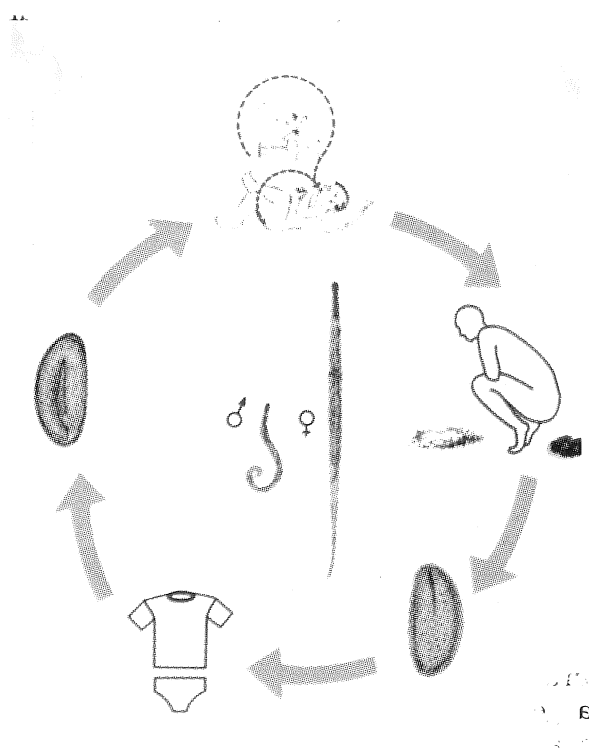
3-Entamoeba histolytica

Common parasite in our country. Although sometimes no symptoms observed, sometimes amebic dysentery, in liver, lung, brain, spleen and skin and other tissues malignant abscesses are brought about. Diagnosis; trophozooid and cysts are seen under a microscope in the feces. Radiological diagnosis is helpful when tissue abscesses are present and blood tests. Asymptomatic cyst carriers are the cause of infection. Health is regained

with medication in intestinal amobeasis and surgery and medication are both necessary for tissue froms. Prevention; the identification and treatment of asymptomatic carriers. Personel and environmental hygiene rules must be closely followed.

4- *Hymenolepis nana*

Mostly seen in children as a parasite. The adult form is between 10-40 mm in lenght and 0.5-1 mm in width. The foremost cause of infetion is the eggs found in the feces of infected persons. Eggs are taken orally and hatched in the intestines. The larvae holds onto the intestine mucousa and forms an adult parasite in a short time. *Hymenolepis nana* eggs are sometimes carried by arthropods, like fleas. Mostly clinical symptoms are not present. If infection is serious

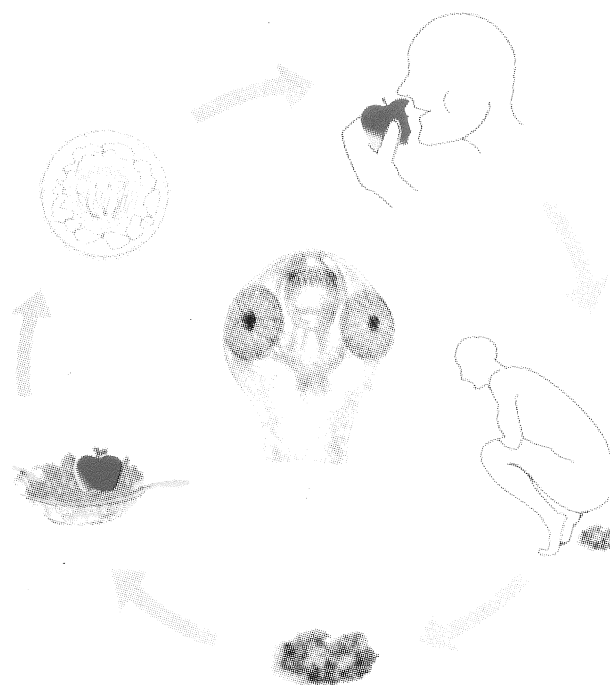


The Life-Cycle of *Hymenolepis nana*

diarrhea is seen. The eggs are identified under the microscope in the feces. With medication, health is regained. The most important prevention is personel cleanliness.

5- *Enterobius vermicularis*

Adult form is between 2-13 mm long and mostly a pediatric parasite. Infection is spread via larvae containing eggs which enters the body through the mouth mostly through food. Sometimes infection can happen through inhalation. The female parasite comes, at night, out of the anus to deposit her eggs in the perianal area. The larvae hatch from the eggs and re-enter the anus and continue their life-cycle. Sometimes the intestine wall is



The Life-Cycle of *Enterobius vermicularis*

pierced and the abdomen and lung is reached. Contamination is from person to person directly or re-infection is possible. Sometimes asymptomatic. Symptoms are chiefly, perianal area itching, sleeplessness, anger, poor appetite. The diagnosis is made possible by celophane tape method. Rarely eggs are found in the feces. Medication makes health possible.

Cleanliness of hands and finger nails, and the prevention of people contacting infected persons, preventing sleeping children scratching the perianal area and later putting their hands in their mouths, boiling under-wear and sheets, education will allow prevention.

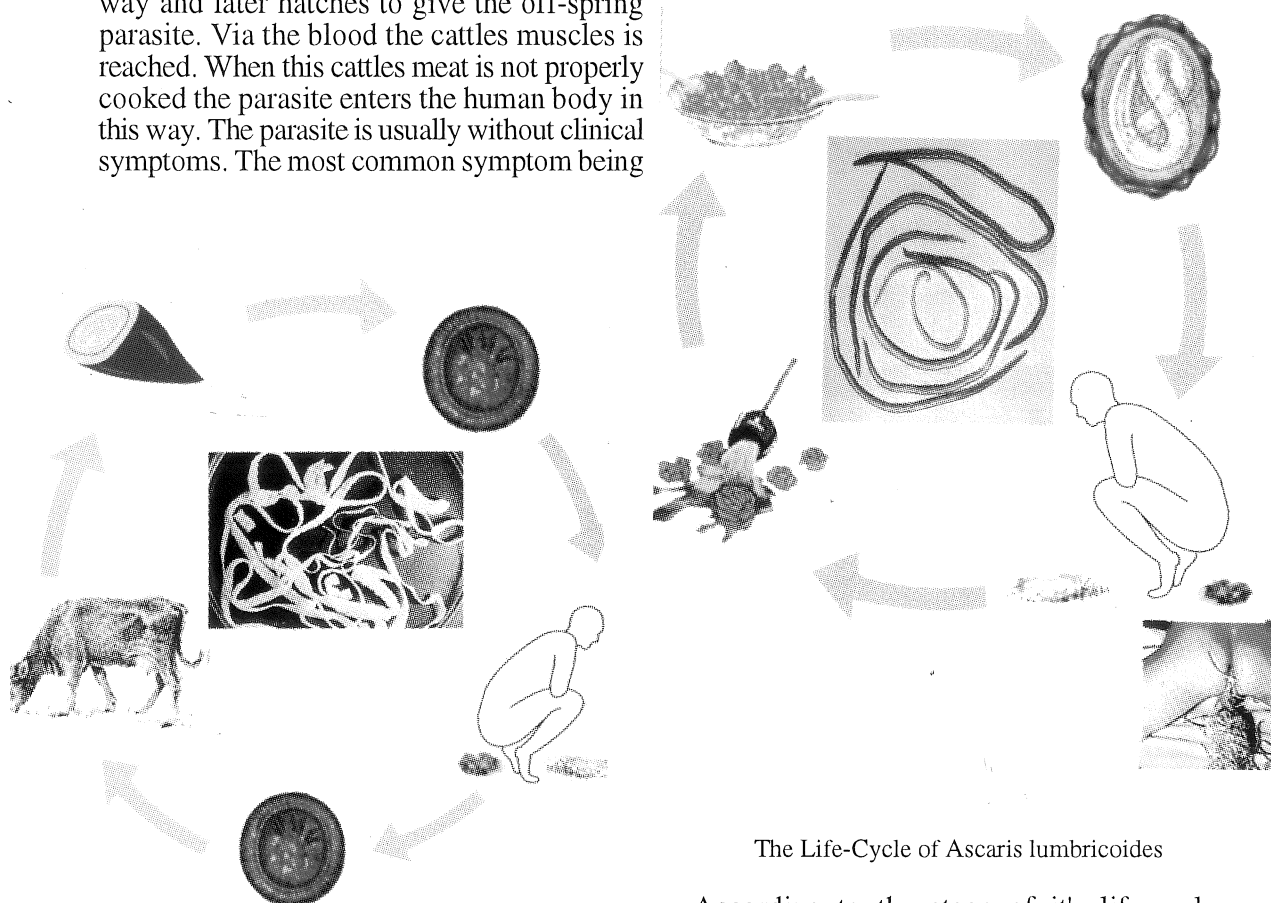
6- *Taenia saginata*

A parasite found in our county. This parasite lives in human small intestine and it's adult form reaches 5-10 metres in length. From time to time mature segments break from the body of the parasite and from the large intestine leave the person from the anus. If pregnant segments fall on the soil, cattle devour it with the grass. It enters the animals small intestine in this way and later hatches to give the off-spring parasite. Via the blood the cattles muscles is reached. When this cattles meat is not properly cooked the parasite enters the human body in this way. The parasite is usually without clinical symptoms. The most common symptom being

the awful feeling when segments are excreted in the feces. Epileptic seizures, paralysis ear tinnitus, incontinance, appetite problems, anemia, abdomen pain, nausea, vomiting and sometimes diarrhea, can be observed. Diagnosis; the eggs and segments of the *Taenia* in the feces Medication for treatment. Prevention; eating meat well-cooked, the proper elimination of feces and the extermination of infected animals

7- *Ascaris lumbricoides*

The adult length is 15-30 cm., and it enters the circulation in the larvae form reaching the heart, lungs and digestive system.



The Life-Cycle of *Taenia saginata*

The Life-Cycle of *Ascaris lumbricoides*

According to the stage of it's life-cycle, symptoms vary. On larvae migration lung bleeding, inflammation, cough, fever is observed. The symptoms of the adult form is abdomen pain, epileptic seizures, developmental retardation, bowel and bile duct obstruction. Diagnosis; eggs in the feces. Medication leads

to treatment. Prevention; personel hygiene, feces elimination and education.

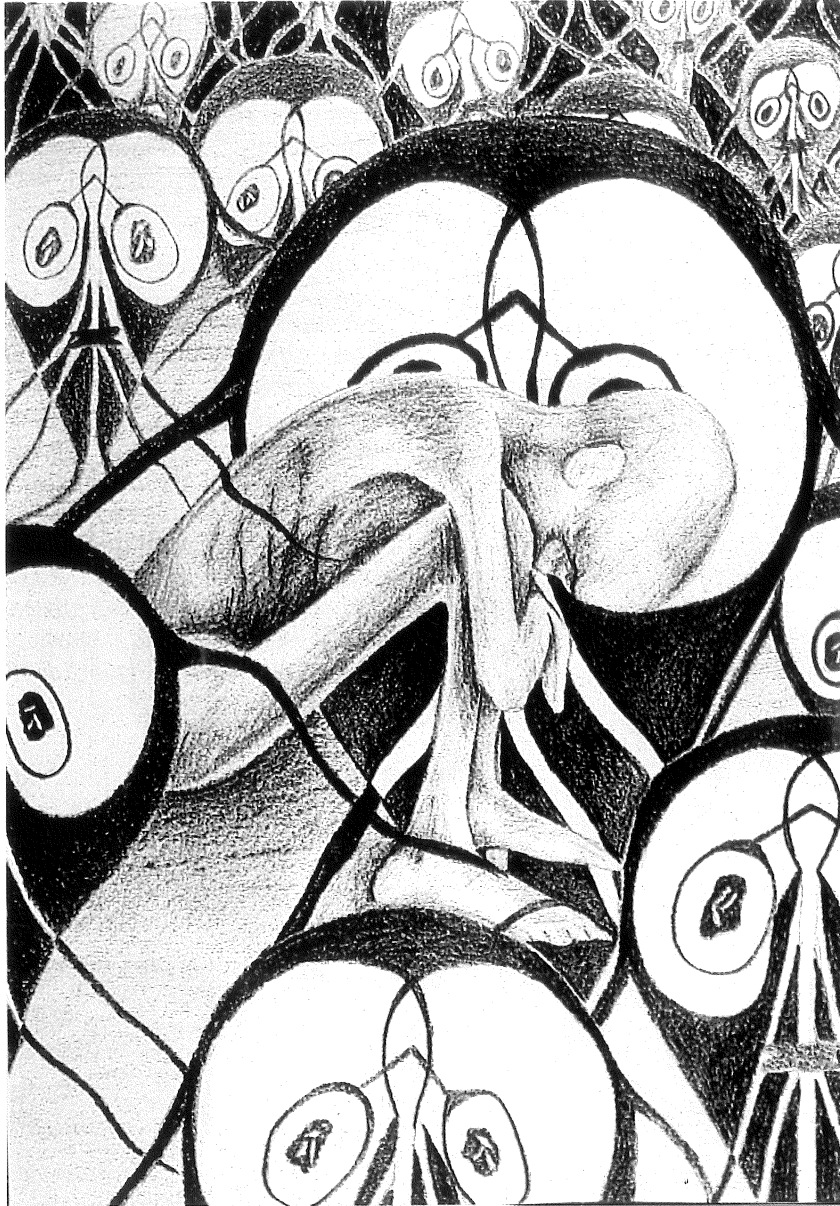
8- *Trichuris trichiura*

A parasite in our county. 30-50 mm. long is the adult. Looks like a whip. The larvae containing eggs entrance to the body is via the mouth. On reaching the duodenum they hatch

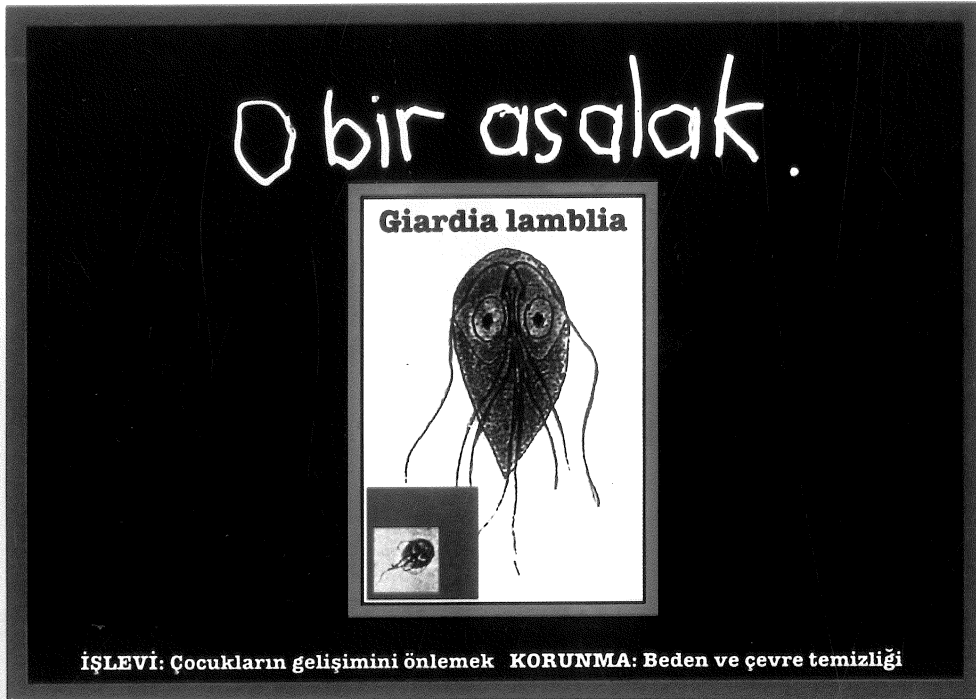
and grow, they continue their life-cycle in the small intestine. Diarrhea, abdomen ache, anemia, weight loss are common symptoms. Dyzentery and appendisitis and rectal prolapsus can be seen in children. Diagnosis, the immature eggs seen in the feces Medication is the treatment. Prevention, personel hygiene, elimination of human waste and education.



The Life-Cycle of *Trichuris trichiura*



Eskişehir Habitat-Health Caucus of Bozan The Most Common Intestinal Parasites of the
Eskişehir Region



ESKİŞEHİR HABİTATI (BOZAN) SAĞLIK KOZASI

Combating Parasitic Diseases

Poster: It is a pest-Giardia lamblia

Functions: Preventing the development of children

Prevention: Body and environmental hygiene

Eskişehir Habitat-(Bozan) Health Caucus



THE HEALTH CAUCUS COMBATING PARASITIC DISEASES

Caucus Easier
Erol BÜYÜKMERİÇ
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