



SALTING OF SUCKERS AND THE DISEASES THEY CAUSE LIVERWORM

Nargiza Eshmamatovna Djumanova

Senior Lecturer, Department of medical biology and genetics
Samarkand State Medical University

Azimjon Norimov Qaxramon o'g'li

Samarkand State Medical University 1st year student

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Abstract:

The class of suckers includes about 3,000 species of parasitic flatworms. In terms of their structure, suckers are close to ciliates, but as a result of living with parasites, their body structure is simplified. The body of suckers is leaf-like, and there are two suckers characteristic of this class: oral sucker and abdominal sucker. With the help of both suckers, suckers cling to the body of their master. In addition, the mouth sucker also serves to suck food. Their body is covered with a skin-muscle bag.

Keywords: fascioles, transit eggs, invasion eggs, *Limnea truncatula*, definitive boss.

INTRODUCTION. The upper layer of the skin is the tegument and is structured similar to the epithelial layer of turbellaria. The muscles at the base of the tegument form annular, diagonal and longitudinal layers. In the upper layer of the tegument, there are small cuticular growths, which help the parasite to adhere more firmly to the host's organs. Internal organs are located in a skin-muscle pouch. There will be no body cavity. Parenchyma is well developed. The digestive system starts from the mouth and continues to the muscular larynx. The mouth is located in the front part of the body and is surrounded by a mouth sucker. The larynx passes into the small esophagus. The midgut consists of two branches extending from both sides of the body. Both branches of the intestine end in a closed manner, undigested nutrients go out again through the mouth. In large mammals, the intestine is branched will be. The urinary system is protonephridia. A large separation channel one by one, creating a special hole in the back of the body, and out will open. The nervous system consists of a pair of nerve nodes and three pairs of nerve columns, the largest of which are lateral nerve columns. Nerve columns are connected to each other by means of transverse nerve fibers. Peripheral nerves begin from nerve columns. Sense organs are very poorly developed. Free-living larvae have 1-2 pairs of eyes and skin receptors. The reproductive system is hermaphrodite. The cycle of development is accompanied by a change of owners. Eggs develop in water. There will be one or two intermediate bosses.

THE PURPOSE OF THE STUDY: to study the structure and development cycle of the liverworm. A study of its parasitism in the body and causing patalogic conditions.

RESEARCH MATERIALS AND RESULTS: Liverworm (*Fasciola hepatica*) or *Fasciola* is a causative agent of fascioles, a disease found in herbivorous mammals and humans. Morphological structure. The *Fasciola* body is leafy and 3 - 5 cm long. On the side of the anterior conical tip is the oral sucker, a little below it is the abdominal sucker. The body of the liverwort is covered with a skin-muscular sac. At the base is the parenchyma, and between the tissues are the internal organs. There is no body cavity. The digestive system begins in the oral cavity and is followed by the muscular larynx. The larynx plays a major role in food processing. The femoral esophagus consists of two branches extending from two sides of the body and continues into the midgut. Small branches protrude from each branch of the intestine and end berkish. The excretory organs (urinary excretory system) are structured in a protonephridial type. The nervous system is centralized, consisting of a pair of ringed nerve nodes. From these come out a number of nerve columns, the main ones being a pair of lateral branches, arranged lengthwise. Peripheral nerves start from the lateral branches. The sensory organs are made up of sensory nerve endings (receptors) scattered throughout the skin. The suckers have a high concentration of receptors. The circulatory and respiratory systems of the liverworm are underdeveloped. The adult period is anaerobic, but oxygen is necessary for the development of its larva. Liverworm is a hermaphrodite. In the middle part of the body are two extremely branched germ. From each germ, the seed route emerges and passes to the front of the body. The seeding pathways combine to form a seeding channel. The seeding duct opens into a Cirrus sac. The Cirrus sac functions as a copulatory organ. Female genital organs include the ovary, yolk sacs, ootype, Melis body, as well as the vagina. In an adult



liverworm, the vagina acts as the uterus. The worm's ovary becomes branched. In the ovary, the mature ovules open through a short ovule path to the ootype, the central organ of the female reproductive system. When the rats copulate, the sperm pass through the vagina into the ootype and fertilize the eggs. On two sides of the worm's body, a large number of yolks will be located. In the yolk, the yellow granules of the egg are formed and feed on the egg yolk as the embryo develops. Yellow granules pass through the canals to the ootype. Each egg fertilized is wrapped in yellow granules, then a pod is formed on the egg. The Melis body opens into an ootype, a gland that secretes a glue-like fluid from itself. In the ootype, fathered eggs pass into the vagina, form and go through a certain period of development. The vagina is tubular, opening with one end to the ootype and with the other end to the Cirrus sac. The developed egg goes out through the hole in the Cirrus bag. Development cycle. The progress of the parasite goes with the replacement of bosses. The main, definitive master of the liverwort is sheep, goats, cows, horses, camels and other herbivorous animals, rarely human. The mature worm lives in the bile ducts of the liver and lays eggs. The eggs of the liverworm pass through the Masters' liver into the bile ducts, then fall into the intestine and go outside along with the ahlat. In order for the eggs to progress, it is necessary to have certain conditions in the external environment. First of all, there are eggs that should fall into the water, and in this the temperature of the water should be 25 - 30°C. In addition, Light is also important. In the dark, the larva does not hatch, but if the egg is moved to the light, then with the passage of 15-30 minutes, a larva - miracidium-emerges from it. Embryonic development lasts 25-30 days. Miracidium floats freely in the water. It will have a light-sensing mirror and a parmesan apparatus that can exert its intermediate master's body. Miracidium passes the next period of development in the organism of the intermediate boss. The intermediate boss is a mollusk with a small belly

LIMNEA IS TRUNCATULA.

The development cycle of liverworm(*fasciola hepatica*). The miracidians are active, penetrating the body of the mollusk and passing into its liver, turning into a sporocyst. Sporocysts do not have eyes and cilia, the body is sac-shaped and filled with embryonic cells. Embryonic cells begin to progress, without fertilization (the path of parthenogenesis). The future period of the larva is called - Redia. Within the Redia, by parthenogenesis, a third period of larval development – the cercariae-develops from embryonic cells. The cercariae have oral and abdominal suckers and a forked gut. The body has a moving organ-a tail. Develop sexual organs-magan. The cercariae will have to fall into the water to progress. The cercariae emerge from the body

of the intermediate master, attach to aquatic plants, drop their tail and wrap in a veil. Its period of such a larva is called adolecscaria. Further progress is carried out only in the organism of the permanent (main) boss. The adolecscariae pass passively to their master (passive invasion). When herbivores drink lake and puddle waters, or when lake-side adolecscariae eat sitting plants, they fall into the animal's stomach. Under the influence of gastric juice, the veil over the adolecscariae melts and a larva emerges from the inside. The larva moves to the liver, develops here, matures.

The adolecscariae that enter the body become mature liverworts after 2.5-4 months. It lives an average of 10-12 months to 3-5 years in the body of the last boss. Parasitological diagnosis consists of microscopic examination of the Ahlat. In this case, liverworm eggs are detected in the patient's population. If a healthy person eats a mole's liver with fasciolosis, parasitic eggs can be found in his stable. In this case, the parasite eggs leave directly from the human digestive canal without development(transit eggs). The invasion stage of the parasite for humans is the adolecscaria. Personal prophylaxis: to prevent humanization with fasciolosis, it is necessary not to drink water from non-flowing water sources without boiling, to thoroughly wash and consume herbs growing in water and swamps. Also puddle water should not be drunk without boiling, vegetables and Greens should be thoroughly washed. And infected people need special treatment. Public prophylaxis consists of the elimination of abdominal-footed molluscs from water bodies and the implementation of Veterinary choratadbirths against cattle fasciolosis.

Pathogenic effects. The liverworm feeds mainly on blood and liver tissue, causing great damage to its master. This parasite causes severe liver disease due to the accumulation of oxac in the bile ducts of the liver and its occlusion. Liver cells are injured, cirrhosis, mechanical jaundice develop. The appetite of an animal infected with liverworts disappears, it goes away, its milk decreases. Tumors appear around the abdomen, chest and throat of a sick animalis. The disease ends in death if left untreated.

CONCLUSION: First of all, most parasites are necessarily transmitted as a result of non-compliance with the rules of personal hegiene. Above we talked about liverworm(*fasciola hepatica*). Puddle water is transmitted as a result of not boiling water, non-flowing water well and not washing well the greens that we eat in love, not only greens, but also vegetables well. It turns out that more personal hegiene can also be transmitted through the nonose hands.

In this article, I talked about the structure of the liverworm, the ways of development and transmission. The bottom line is that we will be able to follow the rules



of more gegiena, clean and wash the greens, vegetables, fruits that we eat and, in addition, pay attention to the shelf life of food, not only preventing the transmission of liverworts and similar parasites.

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