THE PROBLEM OF PEOPLE TENIARINHOS AND PIG CYSTICERCOSIS IN UZBEKISTAN

M. Aminjanov*, M. Israilov and A. Qaxxarov
Uzbek Veterinary Scientific-research Institute and Scientific Laboratory “Prophylactic”, Samarkand city, Uzbekistan

Cysticercosis is a chronic zoonotic parasite disease of pigs. Inflammation is caused when the parasite infests tissues of swine. The larval stage of *Taenia solium*, a parasite in the small intestine of humans, is the source of pig infection. Humans may be infected either by contaminated pork or direct human contacts.

Pigs are usually infected by Cysticercosis through eating helminths or proglottids that are excreted by people suffering from this disease. They enter the animal’s body through water and feed/fodder. In the case of mineral starvation, animals will eat their litter and lick the ground, and thus become infected.

The proglottids of the parasite are compounded and produce huge numbers of eggs in the stomach and intestinal tract of the host. Eggs penetrate the blood vessels and lymphatic system, they run with the blood stream and lymph system to muscle, where eggs of *taianrinhus* begin to evolve. They transform to Cysticercosis which contain papilla, embryos, proboscis of hamulus as a result of their transformation in 2-4 months.

Immature forms of the parasite develop in livers, lungs and brain. Mature Cysticercosis are not large: bladder-like cysts are small, 08-20 mm size, appear to be filled with clear liquid containing a head which looks like a white ball. Cysticercosis remains viable no more 6 years in pigs.

After the death of the host animal, Cysticercosis dies in 2-3 weeks and in frozen meat at a temperature of -10°C in 10-15 days; they die very fast at 70-80°C, moreover they die in 5 minutes at 48°C.

Broiling to an internal temperature of 100-110°C and heating sausage to an inner temperature of 60-67°C causes the Cysticercosis to die in 1-1.5 hours.

People are infected by *Taenia solium* by eating pork which has not been thoroughly cooked, including mincemeat, barbecue, and different kinds of fresh pork dishes. Larval forms are exposed by gastric and intestinal juice in the gastrointestinal tract of person and with the help of their hamulus attach to mucous membranes.

Tapeworms reach puberty and evolve to maturity and limbs are defecated from the human host in 70-90 days. One ill person can evolve 9-10 proglottids in a day. The parasite can produce 2,500 proglottids during the year. Over a period of years, one proglottid can produce 60,000 eggs in the intestine.

Eggs of *T. solium* survive in the ground to a depth of 50-100 cm for 17-95 days in summer in Uzbekistan but in cooler seasons can survive for 7-12 months. Most parasite eggs die when air temperatures reach +40-50°C in July.

Eggs survive in water up to 31 days in depths of 0,5 m in spring, 85 days in summer, and 157 days in autumn but eggs inside of the proglottids survive for 214 days.

Humans are the only host of *T. solium* and consequently the source of the infection in pigs. Workers at swine breeding farms are at more danger to spread pigs Cysticercosis. Therefore, workers at swine breeding farms should be examined regularly by the Medical Institution.