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PROGRAM & ABSTRACT

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patients with NCC and their cerebral symptoms can be due to the folate deficiency.

(60)

**Some Aspects Of Teniasis-Cysticercosis Caused By
T.Solium And T.Saginata In Central Italy**

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epidemiology.

Between 1985 and 1995, 12 human cases of cestodiasis caused by *T.saginata* and 4 cases of *T.solium* infection were diagnosed in the Institute of Veterinary Parasitology, University of Perugia. Most often, anamnestic evidences showed that patients had been infected by consumption of raw or partially cooked beef and pork meat. Seven of 12 patients infected with *T.saginata* contracted the infection in Italy : other five patients in Central Europe(3) and in Turkey(2). On the contrary, the *T.solium* carriers had surely been infected in Central America.

During the same period, this Institute analysed 22 serum samples from patients with neurological syndrome, suspected to suffer from neurocysticercosis and 2 serum samples from patients that had already undergone aspiration surgery, 3 and 5 cysts respectively (Baldelli B & Bizzozzero L., *Parassitologia*, 1990,32,9-10, Suppl.1). All the serum samples were tested with ELISA micromethod using a lyophilised cystic liquid of *C. cellulose* as antigen provided by Prof. Cho S.Y., Director of the Department of Parasitology, College of Medicine, Seoul, South Korea.

Out of 22 patients, 2 resulted seropositive with a titre of 1:80 and 1:160 respectively. In other 20 sera, ELISA test resulted completely negative in accordance with successive investigation that

ascertained some other causes of encephalopathy. The 2 serum samples from patients that had undergone surgery resulted positive with a titre of 1:80 and 1:640 respectively.

The above diagnostic results led us to develop series of sero-epidemiological investigations on cattle and swine blood samples from living animals.. In fact, even if it is known that the only means to control and prevent human teniasis is to inspect meat, this method seems to be practically inadequate to condemn all the infected carcasses, particularly those contaminated by low parasitic burden. In recent years it has been known that specific immunodiagnostic test would provide in indispensable aid to control larval cestode infection. For cattle cysticercosis, in a past trial, we had tested 1000 blood samples employing the IHA, carried out according to the technique suggested by Walther & Grossklaus (1972, Zentbl. vet.Med, 19B, 309): we found a seropositivity of 2.8% of the tested animals (Polidori et al., Acta Medit. Patol. Inf. Trop., 1982, 1, 177-180).

In recent investigations carried out between 1992-93, we examined 1000 blood cattle samples belonging to breed from the Central Italy using ELISA micromethod. The results obtained gave a positivity in 2.5% of all tested animals. Apart from the different methods used in the two investigations and the probable higher reliability of ELISA to IHA, we retained that there are no significant differences on cattle cysticercosis incidence in the two different trials.

None of swine sera tested by ELISA to ascertain pig cistycercosis were seroreactive.