ABDOMINAL ANGIOSTRONGYLIASIS — AN UNDER-DIAGNOSED DISEASE

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In Brazil, reports came from Brasilia, São Paulo, Paraná, Santa Catarina e Rio Grande do Sul (RGS). In the southernmost state (RGS), 27 cases have been found in a survey made in Pathology Services, which allowed us to do epidemiological, clinical and pathological studies (Graeff-Teixeira, C., 1986. M. Sc. Thesis, Universidade Federal do Rio de Janeiro, 137 p.).

The children and young adults are predominantly affected in Central America, with no clear sex or race predisposition.

In south Brazil, both adults and children are affected and most of the patients live in rural areas. Abdominal pain, fever, anorexia, nausea and vomits are common manifestations of the disease; sometimes a mass in the right inferior abdominal quadrant can be palpated. The leucogram shows leucocytosis with eosinophilia up to 82% (Morera, P., 1982. In R. Veronesi, *Doenças Infecciosas e Parasitárias*, Guanabara Koogan, Rio de Janeiro, p. 968-71).


It’s important to stress that both Schistosoma mansoni and Angiostrongylus costaricensis are intra-vascular parasites, but with different location: the venous vessels in the former and the arteries in the latter. From its intra-arterial localization, A. costaricensis promotes a huge eosinophilic infiltration throughout the intestinal wall, vascular abnormalities and granulomatous reaction. Macroscopically two patterns can be seen: hyperthrophic-pseudotumoral and ischemic-congestive (Graeff-Teixeira, C., 1986. M. Sc. Thesis, Universidade Federal do Rio de Janeiro, 137 p.).


Without the aid of a serological test, the diagnosis depends on the examination of biopsy fragments or surgical resections. Unfortunately, many surgical specimens, specially those diagnosed clinically as “appendicitis” are not send to pathological study.

Otherwise, many cases of abdominal angiostrongyliasis could have been mis-diagnosed as “eosinophilic enteritis or appendicitis” in Pathology Services, because most pathologists

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were unaware of the disease. In fact, this type of incorrect diagnosis occurred sixteen times in the material examined by us (Graeff-Teixeira, C., 1986. M. Sc. Thesis, Universidade Federal do Rio de Janeiro, 137 p.).

Patients with mild disease, that cures expontaneously and does not require surgical treatment are probably common in the north of Rio Grande do Sul. They may seek the medical services with recurrent abdominal painful episodes. The eosinophilia seen in the leucogram is attributed to other intestinal parasites.

For these reasons, the abdominal angiostrongyliasis is an under-diagnosed disease. In south Brazil, as the awareness of the disease is increasing among the medical personnel, many new cases have been found lately (Fig.).

A better knowledge of the distribution of this human infection will depend on the existence of physicians able to suspect and diagnose it and on seroepidemiological surveys.

With the recent recovery of *A. costaricensis* from *P. variegatus* collected in RGS, we succeeded in maintaining the cycle in the laboratory. We have already began the antigen production, in cooperation with Dr Pedro Morera (University of Costa Rica). Soon we hope to get results that enable us to better evaluate this disease in South Brazil. The prevalence figures of the human disease in Costa Rica – 12/100.000 (Morera, P., 1985. Parasitology Today, 1:173-5) should alert us to the “public health problem” that this parasitosis may represent in our country.