
INCIDENCE OF NEUROCYSTICERCOSIS AT THE UNIVERSITY HOSPITAL, FACULTY OF MEDICINE OF BOTUCATU, STATE UNIVERSITY OF SÃO PAULO (Abstract)*. Thesis. Ribeirão Preto, 1994.

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Neurocysticercosis is a illness intimately related to feeding and hygiene habits. It is rare in Europe, United States and Canada, and practically endemic in Latin America (Mexico, Brazil, Peru, Colombia, Chile) , Asia (India, China), and Africa. It is an important and neglected Public Health problem. The cysticerci can disseminate through the various organs, although there is a sharp preference for the central nervous system, where the clinical manifestations depend on a series of factors concerning the parasite x host relationship, presenting a high variable clinical picture. It is a potentially fatal illness but it may also have an asymptomatic course. Diagnosis is difficult, specially in non-endemic regions or in regions lacking specialized laboratory facilities.

The objective of the present investigation was to study the incidence of neurocysticercosis in biopsy and necropsy material from the Department of Pathology , complemented with general data from patients with this neuroparasitosis admitted to the University Hospital, with a descriptive analysis of its multiple characteristics.

A total of 3,681 full autopsies and 73,256 biopsies performed by the Department of Pathology of the Faculty of Medicine of Botucatu, UNESP, from 1969 to 1990 were reviewed. Autopsies and biopsies concerning patients with cutaneous and central nervous system cysticercosis were selected from this total and the medical records of the patients involved were reviewed. A survey of the 132,480 admissions to the University Hospital, UNESP, from 1972 to 1990 was done, and the 3,225 cases admitted to the Neurology Ward from 1982 to 1990 were selected. Of these, the cases with diagnostic suspicion of neurocysticercosis were studied. The incidence of neurocysticercosis corresponded to 0.30% and 0.29% of the admissions and deaths in general, respectively ; to 0.08% and 3.6% of the admissions and deaths on the Neurology Ward, respectively ; and to 1.57% of neurosurgical biopsies and 1.85% of full autopsies. Neurocysticercosis was the basic cause of death

in 25%, a finding with neurologic manifestations present in 26.5% and with no symptoms in 48.5%. Of the patients with a surgical diagnosis of cutaneous cysticercosis, 65% presented associated neurologic manifestations.

Multiple cysticerci were also observed in the heart (3 cases), lung (1 case), tongue (1 case), striated muscle (1 case), and spinal cord (1 case). Urban origin of the patients ranged from 39.7% to 70%. There was a predominance of males (63% to 80%), although females predominated (53%) among neurocysticercosis cases in which the disease was the basic cause of death. The age range most often involved was 31 to 40 years (27.2 to 41%), although the age range most often involved (23.5%) for autopsies in general was 51 to 60 years. Cutaneous cysticercosis with neurologic manifestations was more frequent (46%) from 41 to 50 years of age.

Pure manifestations most commonly occurring in neurocysticercosis were intracranial hypertension (15.4 to 90%) and epileptic syndrome (7 to 46%).

The preferential location of the cysticerci was multiple (35.2%) and corticomeningeal (32.4%), involving one (46%) or more than one (50%) parasite, with a predominance in the right parietal lobe. The racemose form occurred in 4% of autopsies and 80% of surgical neurocysticercosis cases. Pure or associated ventricular location was observed in 22% of cases. In 80% of cases of intracranial hypertension, there was association with ventricular or multiple location. The cysts examined were viable in 25.5% of cases. Parasite diameter ranged from 1 to 20 mm for *Cysticercus cellulosae* and from 10 to 55 mm for *Cysticercus racemosus*.

The present investigation has confirmed the variability of clinical, laboratorial and pathological picture of neurocysticercosis, as well as its endemic characteristics to the region of Botucatu, São Paulo State.

KEY WORDS: cysticercosis, central nervous system, incidence.

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