PARAGONIMIASIS: THEURAPEUTICAL TESTS  
WITH PRAZIQUANTEL — FIRST REPORT

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IN MEMORIAN to Dr Lauro Travassos, father of the Brazilian and South American 
helmintology, with remembrance and admiration.

Paragonimiasis is a lung disease caused by species of the genus Paragonimus Braun, 1899. 
In Perú it is caused by P. peruvianus Miyazaki, Ibáñez & Miranda, 1969 and characterized as 
an endemic ailment spread mainly in the South of Cajamarca, (Ibáñez & Fernandes, 1980, Bol. 
Peruano Parasitol., 2: 12-18).

Treatment of such parasitosis is based on the 
use of Bithionol, since the effectiveness of 
this drug was proved (Yokogawa et al., 1961, 

In Perú, the use of Bithionol by humans was introduced by Roman & Grados in 1967 
(IV Congreso Latinoamericano de Microbiología: 18, Lima) and continued in massive form 
by Yokogawa et al. (Grant-in-Aid for Overseas Scientific Survey, 1983).

However, Bithionol does not represent a 
good antihelminthic drug due to digestive disorders that its use causes and its parcial 
effectiveness, destroying only the vitelline glands, uterus and eggs of the parasite, (Ibáñez & Ortiz, 

This reasons motivated the search for other 
drugs with more effectiveness and tolerance. That is the case of the use of Praziquantel against P. westermani (Kanzaki et al., 1985, Nippon Kyobu Gakkai Zasshi, 23: 368-373), in 
a previous case which led to the testing of this drug in four two month-old Felis catus (domestic cat), experimentally infected with P. peruvianus, during investigations related to 
determine the longevity of such trematode.

The experimental animals and other four 
cats used as controls had been infected “per 
os” with 20 metacercairiae of P. peruvianus 
collected from the hepatopancreas of Hypolobocera gracilliagnata from the Condebamba 
Valley, Cajabamba, Perú.

Between the days 50-60 after the infection, 
eggs of the parasite were observed in feces. Powdered Praziquantel, 10 mg/kg was admin-
istered orally during 10 days. After 31 days of the drug administration, the eight cats were 
 Necropsied.

It was observed that all the cats treated 
with Praziquantel, presented hepatized pericar-
dial membrane containing some amorphous eggs of the parasite. It was also observed lung 
cysts of typical appearance, from where semidestroyed parasites were extracted, showing 
degenerative processes. Parasites were stained with Delafield hematoxylin and mounted in Canada balsam in order to study the internal morphology.

Subsequently two extrapulmonary parasites 
were found, which presented ovaries totally destroyed. All recovered parasites from cats 
without treatment appeared normal, as in vivo, concerning their internal structures.

These preliminary results allow to affirm 
that the Praziquantel could be used in the treatment of human paragonimiasis, with better 
results than Bithionol due to its greater effectiveness.

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