
Taenia solium Cysticercosis, Irian Jaya, Indonesia

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To the Editor: Cysticercosis, a tissue infection caused by accidental ingestion of eggs released from humans harboring the pork tapeworm, *Taenia solium* (TsCysti), is one of the most serious reemerging parasitic diseases worldwide (1). Taeniasis is an intestinal infection caused by the adult stage of the large tapeworm. Carriers of *T. solium* acquire infection through eating undercooked pork contaminated with cysticerci (larvae). Although most Indonesian people are Muslim and do not eat pork, infection with *T. solium* has occurred in some areas or islands where most local people are Christian or Hindi.

The area most affected by this infection is Irian Jaya, Indonesia, the western half of New Guinea Island (2–4). In field surveys conducted in 2000 and 2001, we found that 5 (8.6%) of 58 local people and 7 (11%) of 64 local dogs living approximately 1 km from the local capital city, Wamena, in Jayawijaya District, harbored adult tapeworms and cysticerci of *T. solium*, respectively (5,6). We have further seroepidemiologic data from 1996 and molecular confirmation of subcutaneous nodules (SCN) as cysticerci of the *T. solium* Asian genotype. We believe this organism is endemic in Irian Jaya. Taeniasis and cysticercosis may be emergent problems in Irian Jaya (3–6). However, further evaluation with computed tomography or magnetic resonance imaging scans is necessary. Based on serologic results and molecular DNA confirmation of *T. solium* Asian genotype (3,7), we concluded that 47.9% (46/96) of local people examined at random, 53.6% of men (37/69) and 33.3% of women (9/27) ≥18 years of age had TsCysti.

An additional 30 local people in non-TsCysti-endemic Merauke District underwent serologic testing. One woman had an exceptionally high antibody titer. She was a transmigrant from another island (South Sulawesi Province). Although Paniai, Jayawijaya, and Manokwari Districts are contaminated with *T. solium* taeniasis and cysticercosis (2–4), no additional critical evidence exists to show that Merauke District has already been contaminated with this parasite.

Taeniasis and cysticercosis may have been accidentally introduced into Irian Jaya in 1969 when the country was governed by Indonesia, since the governing body came from Bali, the only area in Indonesia where
TsCysti was exclusively endemic (2). The contaminated areas in Irian Jaya have increased from the central area (Paniai), to the east (Jayawijaya) (3), and then to the west (Manokwari), where 54 TsCysti cases have been reported (Papua Province Health Office Services, 1997, unpub. data). We wanted to know if taeniasis/cysticercosis had been introduced into the eastern half of New Guinea Island, called Papua New Guinea (PNG) (9). We had already serologically confirmed that 16 (3.0%) of 541 local residents and Irianese refugees in Alice River villages along the border in PNG had asymptomatic TsCysti (Ito et al., unpub. data). Follow-up surveys will be crucial in several other districts including Merauke District in Irian Jaya, PNG, and other islands such as Timor Island, where most of the population is Christian and many suspected cases have recently been reported by the District Health Office Services (10). Schoolchildren should also be checked so that cases can be detected and treated early. Sustainable education of the local community in Irian Jaya, Indonesia, and Papua New Guinea is also necessary.

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References


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Recombinant Vaccine–Derived Poliovirus in Madagascar

To the Editor: Between October 2001 and April 2002, five cases of acute flaccid paralysis associated with vaccine-derived poliovirus (VDPV) type 2 isolates were reported in the southern province of the Republic of Madagascar. The first patient, an 11-year-old child from the urban district of Toliara, first experienced paralysis on October 29, 2001. Three other children, 6, 9, and 14 months of age from Ebakita village, in a rural district of Taolagnaro (250 miles east of Toliara), showed signs of poliomyelitis between March 21 and March 26, 2002. The last case-patient, a 20-month-old child from Ambanihazo village (6 miles north of Ebakita), came into contact with one of the three case-patients in Ebakita in March 2002, and symptoms developed on April 12, 2002 (1). None of the patients had been fully vaccinated against poliomyelitis.

Nine type 2 poliovirus (PV) strains were isolated. A restriction fragment length polymorphism (RFLP) assay, with three different genomic regions amplified by reverse transcription–polymerase chain reaction (RT-PCR) and four different restriction enzymes (Hinfl, DpnII, Rsal, and Ddel) were used to characterize the PV isolates at the molecular level (2). The RFLP profiles of all of the isolates in the two capsid protein regions were identical to that of the type 2 strain of the oral polio vaccine (OPV) in the VP1-2A region (nucleotides 2,872 to 3,647) but slightly different in the VP3-VP1 region (nucleotides 1,915 to 2,883). The observed differences allowed us