

The molecular epidemiology of *Blastocystis* spp. in members of the indigenous Tapirapé tribe, Mato Grosso state, Brazil: an possibility potencial zoonotic

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Blastocystis is the most common eukaryotic organism reported in human and wildlife and domestic animals fecal samples and numerous epidemiological surveys carried out in different countries. However, *Blastocystis* was identified in stool samples during a survey of the intestinal parasites of members of the Tapirapé tribe, who live in the Mato Grosso State in the Brazilian Amazon region. Faecal samples were preserved in ethanol and characterized using *Blastocystis*-specific primers targeting the SSU rRNA gene. The prevalence of this parasite in 378 stools was 21%. Three subtypes were identified (subtype 1, subtype 2 and subtype 3). ST1 was the commonest subtype and was found in 27 individuals (41%), followed by subtype ST2 found in 21 individuals (32%) and ST3 in 11 individuals (17%). Five mixed infection of ST1 and ST2 was identified (7%), one single mixed infection of ST1 and ST3 and another mixed infection of ST2 and ST3. The relative proportion of the different subtypes is different from that seen in Europe and North America where ST3 is the commonest subtype. The ST1, ST2 and ST3 are common in both animals and human. Also ST4 which occurs in the above mentioned regions was not found. Our studies are the first molecular characterizations of *Blastocystis* spp. in Brazil and in Indian communities from Latin American and showed zoonotic potential important to the parasite. (Financial Support: CNPq, DECIT, FAPEMAT, FUNASA).