RESTRICTION ENZYME DIGESTION ANALYSIS OF PCR-AMPLIFIED DNA OF *BLASTOCYSTIS HOMINIS* ISOLATES

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Abstract. Genomic DNA of *Blastocystis* isolates released into 0.1% Triton X-100 was suitable for amplification and yielded similar results as the genomic DNA extracted with standard kit. The specific *B. hominis* primers (BH1: GCT TAT CTG GTT GAT CCT GCC AGT and BH2: TGA TCC TTC CGC AGG TTC ACC TAC A) successfully produced the PCR product of about 1,770 bp with all the 7 *Blastocystis* isolates tested. The restriction fragment length polymorphism (RFLP) patterns yielded by 13 out of 25 restriction endonucleases showed that the 7 isolates could be grouped into 4 subgroups: subgroup-1 consisted of isolate C; subgroup-2 of isolates H4 and H7; subgroup-3 of isolates KP1, Y51 and M12; and subgroup-4 of isolate 27B05. The differences between subgroups manifested as clear-cut RFLP patterns. A common band of 230 bp was revealed by *Eco* R1 in all the *Blastocystis* isolates tested. The band of about 180 bp was revealed by *Alu* I, differentiated symptomatic from asymptomatic isolates of this parasite, and might indicate the pathogenicity of this parasite.

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