***BLASTOCYSTIS* SUBTYPE DISTRIBUTION IN MALAYSIAN INFLAMMATORY BOWEL DISEASE (IBD) PATIENTS**

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**Abstract:** Inflammatory bowel disease (IBD), comprising ulcerative colitis (UC) and Crohn's disease (CD), is characterized by chronic inflammation of the gastrointestinal tract. In Malaysia, IBD is becoming increasingly recognized, although it is still considered relatively uncommon compared to other regions. The prevalence of IBD in Malaysia is estimated to be around 0.4 to 0.5 per 1000 individuals, based on available data. However, these numbers may be underestimated due to underdiagnosis and underreporting, as awareness and diagnostic capabilities improve. *Blastocystis* sp*.* (Blastocystis), a common intestinal parasite, has been implicated in gastrointestinal disorders. However, the prevalence of Blastocystis among IBD patients in Malaysia remains unclear. Polymerase chain reaction (PCR), *in vitro* cultivation technique and direct microscopy was utilized in this study for detecting *Blastocystis* in the colonic lavage/washout and stool samples collected from IBD patients. In this study, out of 53 samples collected from IBD patients, *Blastocystis* subtype analysis revealed that 9.4% of the samples were positive for subtype 3, 3.8% were positive for subtype 2, and 1.9% were positive for subtype 1. Samples were also obtained from individuals undergoing regular screening (*n*=49), among these individuals, Blastocystis subtype analysis revealed that 8.2% of all samples belonged to subtype 3. Therefore, no significant difference in Blastocystis distribution was observed between individuals undergoing regular screening and those diagnosed with IBD. This distribution indicates a varied prevalence of different Blastocystis subtypes among the study population, with subtype 3 being the most prevalent, followed by subtype 2 and subtype 1. In conclusion, the *Blastocystis* subtype analysis conducted on samples from IBD patients in Malaysia revealed a diverse distribution of subtypes, with subtype 3 being the most prevalent.

***Index******terms:*** *Blastocystis* sp*.*, IBD, PCR, subtypes