Genotyping of *Giardia duodenalis* human isolates using PCR-RFLP in Zabol City, East of Iran

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Giardia duodenalis, a flagellated protozoan parasite, is the most prevalent human intestinal protozoa worldwide. About 200 million people in the world are infected with Giardia spp. This study was conducted to determine the molecular epidemiology of the Giardia duodenalis by PCR-RFLP method in Zabol city, Iran.

Twenty-four stool samples were randomly selected from 215 patients diagnosed as giardiasis with microscopic examination. To raise the sensitivity of the PCR assay, the genomic DNA of each isolate was extracted using glass beads and the QIAamp Kit. A single step PCR-RFLP assay, targeting the glutamate dehydro-genase (*gdh*) locus, was used to differentiate within and between assemblages A and B in isolates.

The PCR fragment was determined from 30 isolates, RFLP assay of 24 isolates showed 24(100) isolates as Genotype B group BIII.

The results with the glutamate dehydro-genase gene assay demonstrated that the predominant subtype of *G. duodenalis* in the area is *BIII* that shows animals are the main reservoir of the isolates in this area.