

## Dengue and Viral Circulation in Infected Cases of Ahmedabad: A Single Centre Study

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**KEYWORDS** Dengue Patients. Platelet Count. Viruses. Age. Serotyping. Transaminases

**ABSTRACT** The dengue fever is a debilitating arthropod-borne disease caused by one of the four closely related dengue viruses. The symptoms appear 3 – 14 days after mosquito bite and range from mild fever to very high fever. Based on these symptoms, a total of 178 referral cases were analyzed. Patients were asked to fill out a consent form which was followed by blood collection. Parameters that were analyzed amongst these patients include: Platelet count, transaminases, Dengue Real Time-PCR detection, gel-based dengue serotyping. An overall 12.36 percent (22/178) prevalence of dengue infection was detected in the post-monsoon season that is from October 2016 to March 2017. Younger age groups of males were more affected (18.2%) amongst all groups. Patients who tested positive for dengue had markedly reduced platelet counts as compared to those of negative control cases. Altered serum glutamic oxaloacetic transaminase (SGOT) levels were also observed amongst patients with infection leading to liver dysfunction. The most common serotype prevalent was DENV-3 (45%), followed by DENV-4 (36%) and then DENV-2 (18%). No prevalence of DENV-1 was found. In the absence of targeted vaccination and medication for dengue fever, it is essential to study the epidemiology of it for controlling the spread of dengue during post-monsoon season.