**Review Article**

**Finite Element Method in Orthodontics**

**Dr. Purnima Bhave, Dr. Falguni Mehta, Dr. Renuka Patel, Dr. Harshik Parekh, Dr. Rahul Trivedi**

Name of the Institute/college: Government Dental College and Hospital, Ahmedabad

Corresponding author: Dr. Purnima Bhave; Email id: purnimabhave9216@gmail.com

**Abstract**:

The finite element method (FEM) involves a series of mathematical process that calculates the stress distribution in each element. It allows the calculation of stress resulting from external force, pressure, thermal change as well as other forces. This method is extremely useful for simulation of mechanical process of objects as well as human body that that is complicated to be measured in vivo. The data thus obtained can be visualized with the help of software to study a various boundary condition. This paper emphasizes on application of this method in the field of orthodontics.

**Keywords:** finite element method , mathematical process