SII-7

Basic Research and Clinical Experiences of Magnetic Attachment

Yung-Soo Kim, DDS, MSD, PhD
Professor and Chairman
Department of Prosthodontics and Implantology
College of Dentistry, Seoul National university, Seoul, Korea

The use of magnetic attachment in prosthetic dentistry has long history. However, the basic problems in size, corrosion, weakness to heat, retention quality, and cytotoxicity etc. limited its clinical applications.

Certain magnets which are very recently developed not only have completely overcomed all these problems but also surpassed many advantages of the conventional mechanical retentive devices.

In order to confirm some of these contents of the magnet for using prosthetically, characteristics of resistance of heat, wear, and corrosion cytotoxicity, and stability of retentive quality were tested physically and biologically.

In the view of the obtained observations, the magnetic attachments present long lasting retentive quality, simplicity in use, and improved resistance to corrosion and wearness etc.

The experimental results and a few clinical cases will be presented and demonstrated to show an usefulness and efficacy of the magnetic attachment.