Eliminate rock and roll forever

Soft tissue supported overdentures retained by implants are NOT supposed to "rock." By its very definition, the support for a soft tissue supported overdenture is designed to come entirely from the soft tissue, not from the implants. The function of the implant is to prevent vertical dislocation of the denture and prevent the denture from moving laterally. An overdenture that "rocks" on an implant means that the implant is taking all the vertical loading. One, two, three, or four implants retaining an overdenture are not designed to take such load. If "rocking" is not corrected, cervical bone loss and eventual failure of the implant will result.

To date, every attachment designed to retain soft tissue supported overdentures, whether it is an ERA, Locator, Magnet, CVA ball or Zest ball, has the potential to rock. All these designs have an absolute clearance distance between the base of the attachment and the top of the abutment (Fig 1). Whether through poor positioning of the attachment in the denture, resorption of the alveolar ridge, thickening of the mucosa or excessive loading of the denture by the patient; once the denture settles beyond this predetermined distance, the base of the attachment will contact the top of the abutment (Fig 4). The denture now becomes implant supported as opposed to soft tissue supported.

Although rubber O rings are a better designed to absorb stresses in there is an inherent resiliency with the rubber ring, they still have an absolute predetermined distance (Fig 2) measured from the bottom of the rubber ring to the top of the hex portion of the abutment. When compressed the rubber ring compresses but eventually allows full loading on the implant (Fig 5). The rubber reduces the load but does not eliminate it if the denture settles significantly.

The new Toadstool™ Mini Implants (Fig 10) and abutments (Fig 3) virtually eliminate all vertical loading. This design