



## CLINICAL UPDATE:

### Single-Tooth Implants and Their Role in Preserving Remaining Teeth

Using teeth as abutments for fixed and removable partial dentures can have destructive consequences; implants, however, offer a method of tooth replacement without relying on surrounding dentition for support.

One recent ten-year study evaluated implant survival and prosthetic complications of implants that replaced single missing teeth and were placed in clinical practice. It also examined pre-operative status and survival of teeth adjacent to these implants restorations during this ten-year period of time. The purpose of the study was to evaluate the role of implants in preventing the use of intact teeth for initial support of prostheses and in avoiding the use of additional teeth as abutments upon the replacement of existing restorations.

For this study, 99 patients (treated with 116 implants and 112 single-tooth implant prostheses) were examined between 1988 and 1998. Three implants failed over a ten-year period making the survival rate 97.4%. Complications included the loss of two implant crowns, screw loosening, broken screws, cement washout, margin exposure, and porcelain fracture.

Of 196 teeth adjacent to edentulous spaces, 156 (79.6%) were intact or minimally restored. Only three were restored as part of initial prosthodontic therapy. During the next ten years, only one tooth required a replacement restoration, and one tooth was extracted.

Results of this patient evaluation demonstrated that implant survival over a ten-year period was favorable, with minimal prosthetic complications. Further, teeth adjacent to single-tooth implants exhibited an extremely low complication rate. It was clear, in a close examination of this study, that implants can be effective in preserving intact teeth in patients undergoing initial prosthodontic therapy and in preventing the use of additional teeth as abutments whose existing prostheses must be replaced.