ABSTRACT

The aim of the present study was to assess retrospectively the survival of narrow-diameter implants (2.5 and 3 mm in diameter) in patients with insufficient bone ridge thickness for placement of standard-diameter implants.

Material and methods:
Fifty-one patients with 89 inserted narrow-diameter implants (2.5 and 3.0 mm) were included. Patients were treated with one or more narrow-diameter implants between June 2004 and December 2005. The observation period for all included implants was at least 3 years after implant loading. Outcome measures were implant survival, complications and marginal bone level changes evaluated on panoramic radiographs.

Results:
The mean follow-up period for all implants was 48 months. Only one implant was lost, yielding survival rates of 98.9% and 98.0% for the implant- and subject-based analyses, respectively. Six complications were reported. Twenty-four months after implant insertion, mean bone loss was 1.26 mm (SD 0.51).

Conclusions:
Narrow-diameter implants can be successfully used to treat narrow bone ridges up to 3 years after loading.