Documentation on overdentures
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Overdentures supported by ASTRA TECH Implant System™

Prospective clinical studies with the ASTRA TECH Implant System™ show that the survival rate of implants placed in the mandible is the same when comparing overdentures and fixed bridges, irrespective of retaining system used [1–11]. The use of a ball abutment or a Locator™ for a non-splinted support, as well as the use of a bar attachment for a splinted support, is well documented with a follow-up of 1–4 years [2, 3, 5, 6, 8, 12–24], 5 years [1, 4, 7, 9, 10, 25, 26], and even 12 years [27]. The implants have been placed according to a 1-stage surgical technique [2, 12, 19, 25] or a 2-stage technique [1, 3-6, 8-10, 17, 20, 26, 27]. In addition, an immediate loading protocol has been used for overdentures supported by two unsplinted anterior implants, showing good clinical results [16, 24]. One clinical study evaluated the use of 4 short OsseoSpeed™ implants (6 mm) supporting a mandibular overdenture. After 1 year in function, the clinical results were promising, with 96% survival rate of the implants and maintained marginal bone levels [28].

An overall healthy soft tissue response is reported, with only minor changes in marginal bone levels [29] and very few complications. The reported survival rate for implants ranges from 95% to 100% [1–10, 16, 17, 20, 21, 24–27, 30, 31]. Furthermore, high patient satisfaction has been reported [4, 6, 15, 19, 20, 23, 25, 26, 30–34]. The prosthetic and maintenance care is of great importance in achieving the successful outcome reported with this simple and cost-effective treatment option [2, 3, 5, 7, 12, 16, 19, 25, 27, 32].

One clinical study compared the use of 4 and 6 OsseoSpeed implants for support of a bar and maxillary overdenture [35]. After 1 year, the clinical results and patient satisfaction were comparable between the groups, suggesting that, for cost-effective reasons, 4 bar-connected implants to support a maxillary overdenture is the method of choice [35].

The conclusion is that the ASTRA TECH Implant System provides reliable and predictable support for overdentures in edentulous jaws.

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