

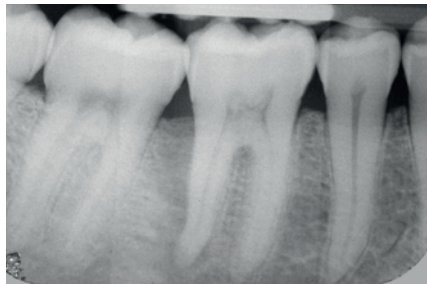


### Anatomical shape, support and colour provided by the use of a patient-specific abutment – Atlantis™ abutment, GoldHue

36 years-old patient with a vertical fracture of 46. The treatment plan was to extract the tooth and replace it by a dental implant. In this conventional placement with conventional loading treatment, the challenge was to restore the position of the gingival contour and the inter-proximal papillae like in the natural tooth, giving in the area of the transitional contour the anatomical shape, support and colour provided by the use of a patient-specific abutment.



**1.** A vertical fracture of 46. When probing there was a distal narrow isolated pocket measuring more than 15 mm.



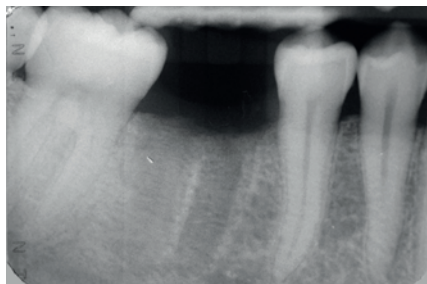
**2.** In the x-ray we could observe a radio-lucency along the distal wall of the distal root with the typical "J" shape seen in vertical root fractures.



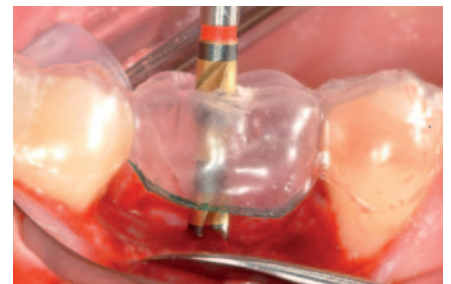
**3.** The tooth extraction was done without damaging the alveolar walls. The socket was scraped and sutured without using grafting material.



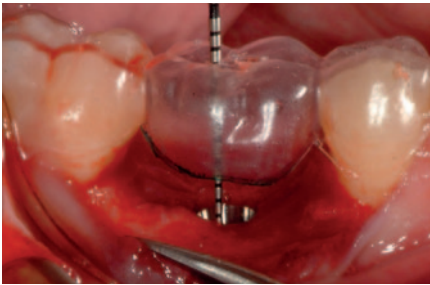
**4.** After 8 weeks of healing period, the soft tissue covers totally the area of extraction.



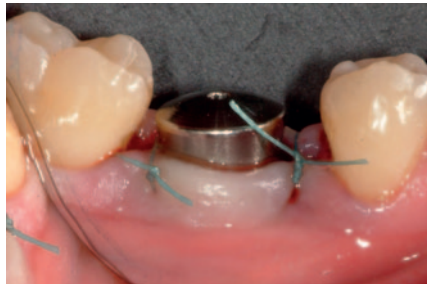
**5.** After 8 weeks, the amount of bone formation into the socket permitted the implant placement.



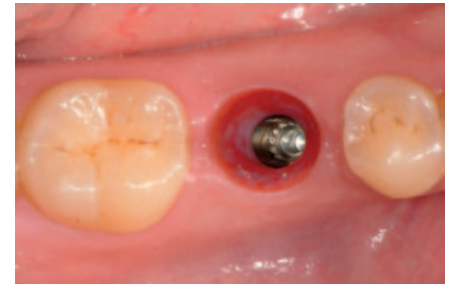
**6.** Using the surgical stent, the osteotomy for placing the implant was done in an adequate position in the 3 dimensions, using as a reference point the zenith of the cervical contour of the planned restoration.



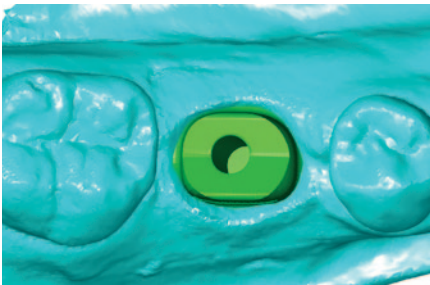
**7.** Using the surgical stent the implant was placed 3 mm apical to the cervical contour of the restoration and symmetrically from mesial to distal and 2 mm lingually for preserving the buccal bone that will support the soft tissue.



**8.** A 7 mm healing abutment was placed to guide the soft tissue to this circular diameter during the healing process.



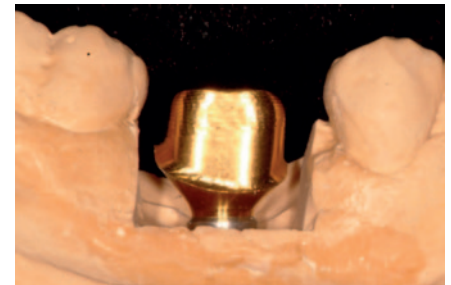
**9.** The healing abutment was removed after 6 weeks and a definitive impression of the implant position was sent together with the opposite model to the laboratory.



**10.** The Atlantis™ abutment was virtually designed with the emergence profile of the molar that must be replaced and then it was processed in the material of choice.



**11.** The Atlantis™ abutment, GoldHue, together with the Atlantis™ abutment screw, was sent to the dental technician.



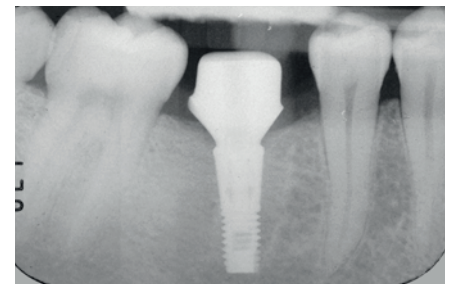
**12.** The Atlantis™ abutment is verified in the working model and the definitive restoration in zirconia porcelain is fabricated.



**13.** Final implant restoration ready to be delivered to the clinician.



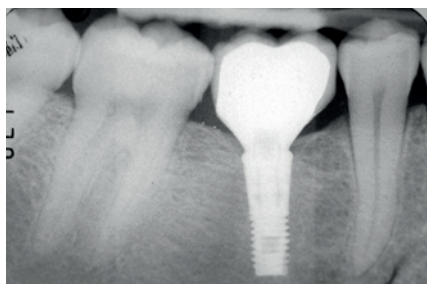
**14.** The Atlantis™ abutment was placed with some pressure into the soft tissue; after some minutes the ischemia disappeared and the abutment went down to its right position.



**15.** Verify correct seating of the abutment using a radiographic image, the transitional portion of the abutment follow the contour of the bone.



**16.** The Atlantis™ abutment, GoldHue was torqued according to the implant manufacturer's torque recommendation – 25 Ncm. The screw head was covered and later on the crown was cemented to the abutment.



**17.** X-ray showing the perfect fit of the restoration, the spaces created for the interproximal papillae and the position of the bone at the level of the implant.



**18.** After 9 months we observed a perfect adjustment of soft tissue around the restoration, filling the space for the interproximal papillae and giving a natural position of the soft tissue contour.