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CBCT imaging analysis of long span bridge with titanium implant (A case report)

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Dental implants are one way to replace the missing teeth, thus the function of mastication, aesthetics and comfort can be restored. The success of an implant is based on the strength or durability to withstand loads of chewing, which formed a close bond between the implant and bone. The imaging of CBCT is a radiographic modality which provides accuracy in the analysis, including analysis of healing in cases of implant.

A 41-year-old man came to dental hospital for CBCT examination to evaluate the success of implant. The patient received 3 implants that were placed on 12, 13 and 17 areas. They were abutments of a long span 6-units bridge on 12-17, with pontics on 14, 15, and 16. Clinically, the patient did not complain the pain or mobility. It was expected that osseointegration between the bone and the implant was well.

Generally, the implant fits with the form of a jacket or a bridge, but in this case the implants are placed for a fairly long span bridge. Radiographically, implant osseointegration is said to be successful if there is contact between bone and implant surface. However, in this case, areas of radiolucency of fibrous tissue were seen between the implant surface and bone. Although this case is clinically declared a success but it is not as expected.

In conclusion, the use of titanium implants in the case of long span bridge does not give optimal result.

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