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SHORTENING DENTAL ARCH USING MINI DENTAL IMPLANT

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BACKGROUND

Shortened dental arches consisting of anterior and premolar teeth have been shown to meet oral function demands. The World Health Organizattion indicates that a functional, esthetic, natural dentition has at least 20 teeth. This treatment option for the partially dentate patient may provide oral functionality, improved oral hygiene, comfort, and possibly reduced costs

CASE REPORT

A male patient, 40 years old, came to Dental Hospital Universitas Airlangga with a complaint to replace the lower right and left teeth that had been extracted 1 year ago with a denture that could not be removed. The patient wants to make dentures to make them more comfortable when chewing. The tooth extraction was performed 1 year ago in the lower left posterior tooth region caused caries

CASE MANAGEMENT

Based on the existing clinical conditions in patient, we examined the thickness of the existing bone. Then we performed to insert an implant fixture 3.0x10mm type TS III SA in region 34 and 3.5x10mm type ET III SA Osstem in region 35. This treatment using one stage surgery with splint crown restoration

DISCUSSION

There have been various references in the literature to the concept of the short dental arch (SDA) as a defined treatment option for the partially edentoulus patient.
The World Health Organization indicates that a functional, esthetic, natural dentition has at least 20 teeth, while the literature indicates that dental arches comprising the anterior and premolar regions meet the requirements of a functional dentition a need satisfied by the short dental arch. The SDA concept does not contradict current occlusion theories and appears to fit well with the problem-solving approach favored in modern dentistry. Advocating the SDA offers some important advantages, one of which may be a decreased emphasis on restorative treatments for the posterior regions of the mouth

CONCLUSION

In this case, the patient refused invasive surgical bone augmentation. Shortening dental arch was chosen due to the loss of antagonist teeth. Implant supported splint crown can be another solution because it's able to maintain the long term of mini dental implant especially in the posterior region

OBJECTIVE

To explain the case shortening dental arch with splint crown using mini dental implant

Intra oral

Drilling sequence for implant Ø 3,0 and Ø 3,5 mm

Evaluation after implant placement

Placement custom abutment (35Nm)

Radiography

Implant insertion with ratchet in region 34 and 35

Healing abutment insertion and flap suture

Control 2, after 1 week

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