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UNILATERAL MAXILLARY LATERAL INCISORS AGENESIS WITH PEG- SHAPED LATERAL AND IMPACTED CANINE. A MULTIDISCIPLINARY CASE REPORT



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Introduction

Agenesis of the upper lateral incisor is often associated with **contralateral peg-shaped or microdontic contralateral** incisor and sometimes with the **impaction of canine**.
This poster describes the orthodontic and restorative steps to achieve the aesthetic and functional resolution in a complex clinical case od a 20-year-old woman who refer to the private practice of Dr Massimiliano Lombardo seeking treatment for aesthetic reasons due to the absence of the right lateral incisor and the persistence of the left deciduous canine.

Clinical and radiographic findings

Intra-oral evaluation showed permanent dentition, except for the **agenesis of 1.2**, persistence of 6.3, 3 mm Class II on the right side and Class I on the left side; **CBCT scan** revealed position 1 **impaction of 2.3** with 60° inclination compared to long axis of 22. The **cephalometric** Roth's analysis showed a skeletal class II tendency with hypodivergence and counter- clockwise rotation of the mandible.



Material and Methods

The **orthodontic treatment** was carried out using a fixed Straightwire Roth appliance and consisted of **extracting teeth #24-35-45**, **symmetrical space closure with medium anchorage in the upper arch**, **anterior maximum anchorage space closure in the lower arch** with and space opening of **2 mm** for the peg- shaped restoration of **#22**. After the **initial alignment** of the upper arch, the **surgical exposition of the impacted canine** was performed with closed flap traction with elastic chain on a SS 19x25 archwire, then with a cantilevered transpalatal arch and finally with a double archwire (main arch SS 19x25 and leveling sentalloy .014 sectional arch engaged in #22). The **detailing of the position of 13 and 14** in position of 12 and 13 consisted in the root bulk of #13 management and intrusion of 14.

ORTHODONTIC TREATMENT

Bonding



Surgical exposition



Progress



Debonding



The **restorative phase** consisted of home dental bleaching and the mock- up prior the final restorations in order to check the final shape and morphology of the teeth. On **the right-side**, direct restorations were made using a three-layer matrix and **injection technique** with flowable composite resin (Inspiro®- Edelweiss) for the camouflage of the canine and first premolar as a lateral incisor and canine, respectively. On **the left side**, a **ceramic veneer** was bonded to the peg-shaped lateral incisor, restoring a harmonious and pleasant tooth-gingival composition.

RESTORATIVE PHASE

Mock-up and injection technique



Ceramic veneer



Results and Conclusions

The decision to keep the peg- shaped lateral incisor was based on the good posterior occlusion on the left side and to the uncertainty regarding the disinclusion of blocked canine, keeping the option of its extraction in case of ankylosis. The final restorative phase included home bleaching, camouflage of the canine and premolar on the side of the agenesis, and indirect ceramic restoration on the peg-shaped lateral incisor, resulting in a harmonious tooth-gingival aesthetic while respecting periodontal tissue biology.



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