

# PP12: OLIGODONTIA, TREATMENT PLANNING AND MULTIDISCIPLINARY APPROACH : REPORT OF TWO CASES

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Oligodontia (congenital missing of 6 or more teeth ) is accompanied by a spectrum of other serious disorders associated with speech, mastication, orthodontic, social and psychologic implications. This poster presentation elaborates on the treatment philosophy, approach and planning.



## REPORT OF CASES

**Maria (7years): Agenesis of 17 teeth** (#16,15,14,12,22,24,25,26,31,32,33,34,35,37,41,42,47)

Normal skin & hair. Speech and psychological problems (low self esteem, emotional stress due to poor aesthetics) and poor oral hygiene. Hypoplastic maxilla and alveolar bone (due to multiple ageneses), insufficient support of upper lip, bilateral posterior crossbite, prognathic mandible. Occlusion in Class III, horizontal overjet (-2mm),



**Vasilis (11years) : Agenesis of 10 teeth** (#16,12,22,26,31,32,37,41,42,47)

Normal skin & hair. Speech and psychological problems. Underdeveloped maxilla and mandible with narrow arches with diastemas, bilateral posterior crossbite. Occlusion in Class I with increased vertical overbite (7mm) and facial reduced vertical dimension.

## MULTISCIPLINARY APPROACH AND PLANNING

### APPROACH OBJECTIVES

- Psychological support, speech improvement and diet control.
- Dental health support to maintain alveolar bone by maximum preservation of deciduous teeth.
- Orthodontically, to favour the normal development of the craniofacial structures, correct the malocclusions and fulfil future prosthetic-requirements.
- Prosthodontically, to achieve functional and aesthetic rehabilitation.

### PLANNING

#### Phase A= Multidisciplinary Synergy (4-8 years)

- Orthodontist, is usually the first to diagnose the problem, to organize the synergy of all specialties and to communicate with parents.
- Dentally, perform oral hygiene & diet control, systematic preventive programs.
- Paedo-Psychologist and speech therapist consultation.

#### Phase B=Ortho & Prosthodontics (8-18 year old)

##### B1: Ortho-Plan

MARIA (Ortho/initial-Ortho/final)



VASILIS (Ortho/initial-Ortho/final)



- Preserve the alveolar bone by maximum retention of the deciduous teeth.
- Harmonize the arches and the occlusion (Maria /expansion of upper arch and constriction of lower arch. Vasilis /expansion of upper arch and correction of deep bite).
- Interact with the future Prosthodontist to optimize the results (Maria's #43 located to favour future prosthetics).
- Fulfil patient's cosmetic and social demands (deciduous teeth on the wire).

##### B2 : Prosthodontics

Removable temporary partial dentures to preserve the vertical dimension of occlusion and improve the functional (speech and tongue) and aesthetic patients expectations. Replacement of partial denture when needed.

**B3 : Recall examinations** till growth of craniofacial structures is completed.

#### Phase C=Prosthetic rehabilitation (18yr +)

Permanent rehabilitation (fixed prosthetic or implants).

### CONCLUSIONS

- The multidisciplinary approach, is the best approach to fulfil the wide spectrum of the patient's needs.
- The treatment plan has to be comprehensive, detailed, systematic and flexible in different needs, accompanied by frequent recall examination till adulthood.
- The Orthodontic plan must favour the normal development of the craniofacial structures and meet the requirements of prosthetic rehabilitation.
- The early diagnosis and sound communication with parents is of profound importance in this long "journey".

### LITERATURE

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