

Autism spectrum disorders (ASD)



Clinical case 1

Courtesy Dr Andrada Bratu

General Dg:	autism
Dental Dg:	multiple caries, simple (premolars and first permanent molars)
	or with pulp involvement (37,47)
Orthodontic Dg:	Class II/1; maxillary compression with overjet

Reason for seeking treatment: Unsatisfactory aesthetics (parents' perception, as well as patient's own request)



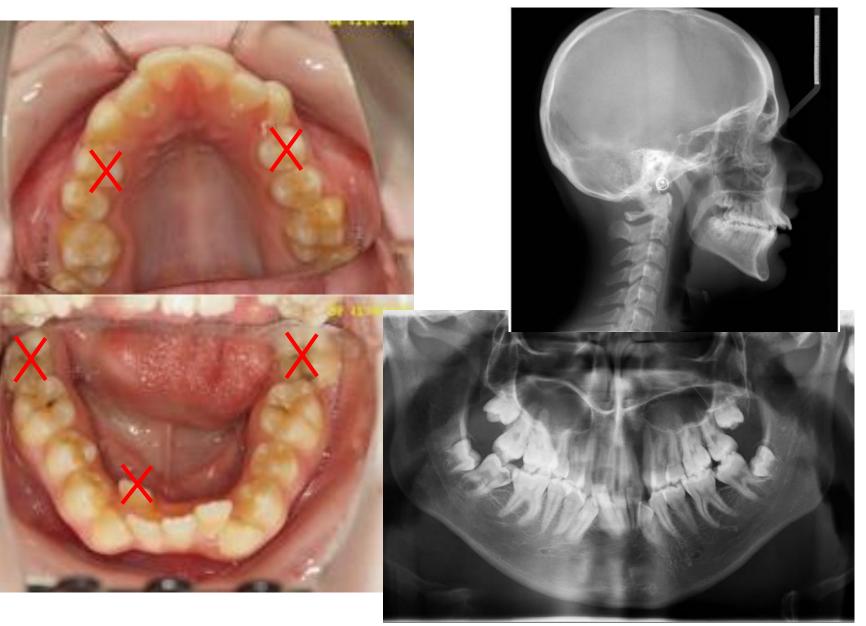
Overall view of **treatment stages**:

- Initial evaluation of clinical case and behavior
- Behavior management
- Treatment planning
- Fixed appliance upper arch
- Extractions under GA given the crowding and the expected difficulties in obtaining reasonable compliance for complex caries treatment, teeth with the worst caries involvement were extracted (14,24,37,47,42)
- Fixed appliance lower arch





Initial clinical views (courtesy Dr Andrada Bratu)



Barriers encountered and ways to get through:

- Difficulties in the beginning in gaining patient's confidence; initial total reluctance towards all the dental staff, patient would not enter the office or let herself be examined
- Anamnesis revealed a great passion for singing. In-office experience also revealed a huge talent. Music helped establishing the mutual trust relationship with the dentist and all the dental staff.
- Treatment begun with familiarizing the patient with the dental instruments. Professional brushing followed, then minimally invasive manoeuvers were performed. Tell-Show-Do method worked well.
- Dental compliance improved a lot. Patient is still very selective, only allowing her favourite dentist to treat her. A lot of explanation is given during every session. During treatment, patient likes to use the remote control to change between various music channels and she even sings sometimes. Extra time is planned for each session in order to let the patient feel at ease.

Barriers encountered and ways to get through:

- In order to postpone extractions under GA, 37, 47 with deep caries were initially treated in-office, by successive excavation technique, using interim restorations.
 Infiltration anaesthesia could not be considered, as the patient always insists on seeing and touching first any instrument before it is actually used.
- Teeth to be extracted were chosen as to avoid complex treatments (like endo) and to ensure shortest duration for the orthodontic treatment (e.g. although 34 and 44 were first options to compensate crowding in the lower arch, 42 erupted lingually was preferred). Compromised 37 and 47 were extracted, making way for 38 and 48 to erupt. All extractions were performed in the same session in order to avoid potential refusal of patient for another GA.
- Extractions were performed under GA in another clinic in order to avoid any risk of association of potential subsequent discomfort with the place and staff of the clinic she is being treated in.

Good points during treatment:

- Dental compliance was very difficult to obtain, but once gained it gave great satisfaction for the dental team
- Fixed appliances very well accepted
- Good to very good **oral hygiene**, entirely performed by patient and completed by dentist during treatment sessions
- Patient's dental compliance was not affected by the GA episode

Interesting: Patient ALWAYS choses red modules for her brackets, without any hesitation

Clinical case 2

General dg:

- Autism
- ADHD
- Prematurity











Dental dg:

- Multiple caries,
 - untreated, +/- pulp
 - involvement
- Crowding
- Increased overjet
- Premature loss of primary teeth due to caries



Patient fairly cooperative (Frankl scale 3), allows himself to be treated in-office (notice relaxed body posture) General dg: autism; epilepsy; severe intellectual impairment; hirsutism; non-verbal

Reason for seeking treatment: acute pain

Anamnesis: oral hygiene reported by parents as impossible

Problems encountered: clinical/rx examination impossible (Frankl score 1)

1st session – examination and treatment under GA:

- 37, 47 caries without pulp involvement → glassionomer restorations
- 35, 46 caries with pulp involvement → 35 endodontic treatment, 46 pulpotomy, + g-i restorations
- Gingival overgrowth due to anti-seizure medication, plaque accumulation, calculus → scaling, professional cleaning



During the following 16 y (2003 – 2019) the patient underwent 1 more intervention under GA and several treatment sessions under common dental office circumstances.

Main *problems* encountered :

- Patient does not open her mouth except for eating and (some) speaking → in-office sessions are a real challenge
- With practically no oral hygiene caries' recurrence is unavoidable
 → gradual loss of teeth
 - A third GA is needed to extract compromised 33, 35, 37

Good point.

Patient's **attitude** once her mouth is practically forced open could be regarded as somewhat positive: although she constantly tries to shut her mouth, she does not make sudden moves with limbs \rightarrow some clinical manoeuvers (scaling, cavity preparation, glass-ionomer fillings or even root canal treatment in accessible teeth such as 13, 45) are feasible under common dental office circumstances. 16 y after first visit – patient needs a 3rd AG for 37, 35, 33 to be extracted and some repairing of old restorations



CONCLUSIONS

Clinical management of autistic children needs to be adjusted in accordance with patients'reactions; no "patterns"

Autism is NOT an absolute indication for treatment under GA

➤ Anamnesis → source of important info for behaviour management; "DO"s and "DON'T"s

You've seen ONE autistic child means you've only seen ONE autistic child.

Perseverance is needed; routine is appreciated

- Expectations need to be adjusted in accordance to possibilities
- ➢ Raising family's awareness is crucial → early and regular check-ups → efficient prevention, interception → less complex dental problems → less complex treatment needed → better compliance