



the Child Dental Patient with

Cerebral palsy



- General dg:
 - Spastic paraparesis
 - Infantile encephalopathy
 - Bilateral hearing impairment
 - Severe ophtalmic disorder
 - Autoimmune thyroiditis
 - Mitral valve prolapse



- Oral features
 - Unilateral cheilognatopalatoskizis on the left side
 - Hypodontia – 2.2 agenesis
 - Persistence of 6.2, 6.3
 - Multiple uncomplicated caries

- Due to patient's non-compliance, initial treatment was done under GA:
 - Extractions: 62, 63
 - Conservative treatment of caries using silver amalgam / GI

2 years after
(age 21)



Previous treatments were in place, but new problems occurred

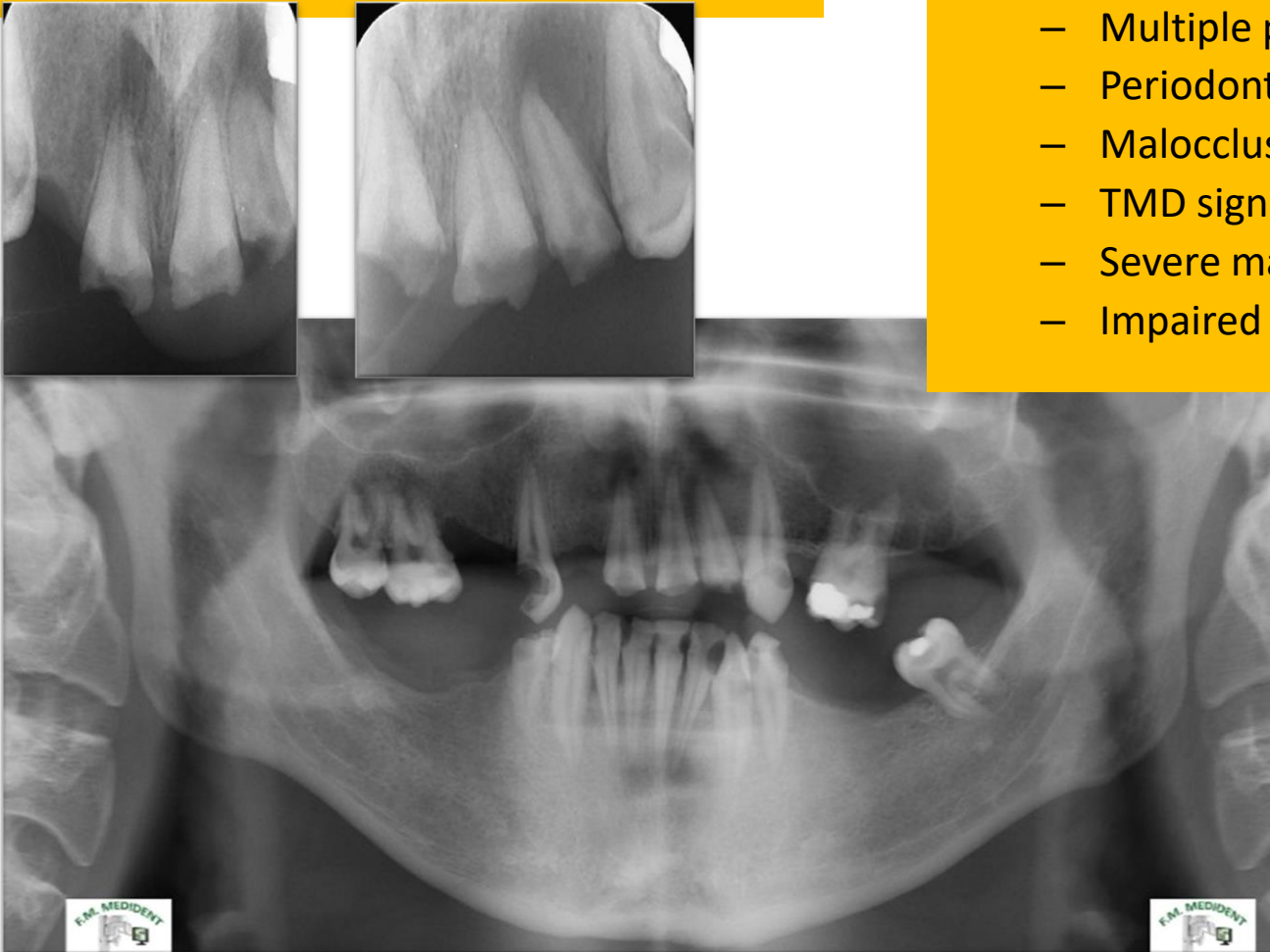
Clinical aspects at age 21



Patient allows herself to be treated in-office. Composite restorations, endodontics and even prosthetic restorations are now accepted.



- General dg:
 - Spastic paraparesis
 - Mild intellectual impairment



- Oral findings:
 - Multiple caries (treated/untreated, with/without periapical involvement)
 - Multiple previous extractions
 - Periodontal disease
 - Malocclusion; deep bite
 - TMD signs and symptoms
 - Severe masticatory dysfunction;
 - Impaired appearance



Dental history

- Previous attempts of conservative treatment, mostly failed due to lack of compliance
- The patient was referred for extractions of compromised teeth under GA
- After the GA session, the patient was referred to the Pedodontics Department for conservative treatment
- Cooperation was initially very poor, but improved with time and patience – patient gradually accepted treatment in dental office

Treatment plan

Under the given circumstances, an ideal full-mouth rehabilitation was regarded as non-feasible. Patient and family requested an improvement of appearance and finally agreed with:

- Direct restorations on: 17,16,23,26,33,31,37,41,42,43
- Endodontic treatment on 13,11,21,22.
- Post and core on 11,21,22
- Metallo-acrylic bridge 13-22

TELL-SHOW-DO technique was used during all phases of treatment



Clinical aspects during treatment



Final clinical aspect – appearance significantly improved

General dg: cerebral palsy

Reason for dental visit: seeking a second opinion on the management of fractured 21; previous recommendation: extraction

Anamnesis: - recurrent trauma due to poor stability
- fractured fragment was found and stored dry for 4m (clinical appearance: white, dehydrated)

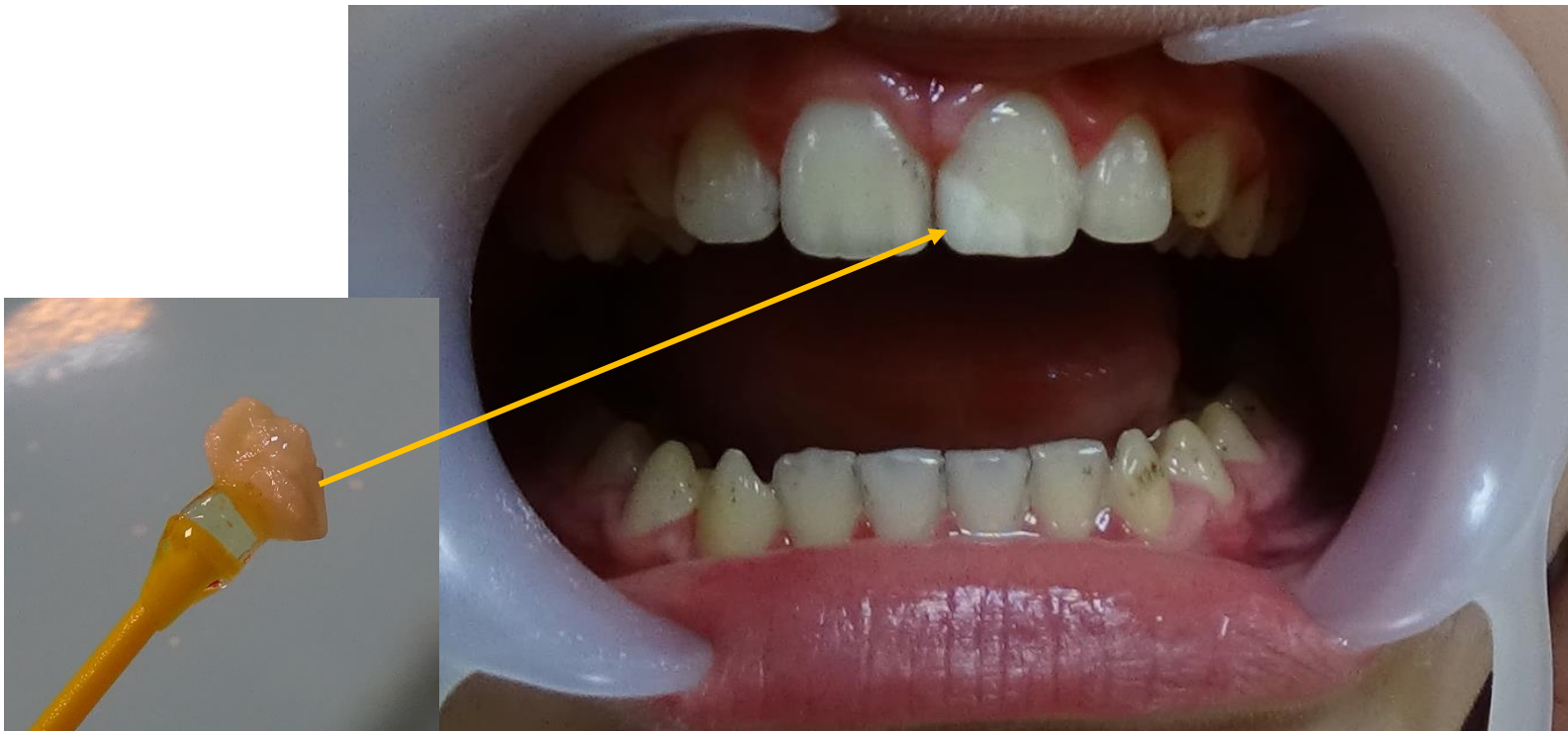


Oral findings:

- 21 crown fracture (without pulp involvement)
- Brown extrinsic discoloration
- Gingivitis; poor oral hygiene
- Incipient cervical demineralization

- Professional cleaning is done using regular suction and power suction simultaneously in order to avoid choking.
- Patient's mom is holding his head.
- Despite difficulties in controlling movements, patient is willing to cooperate
- 21 responds to vitality test
- Decision to attempt reattachment of fractured fragment is taken



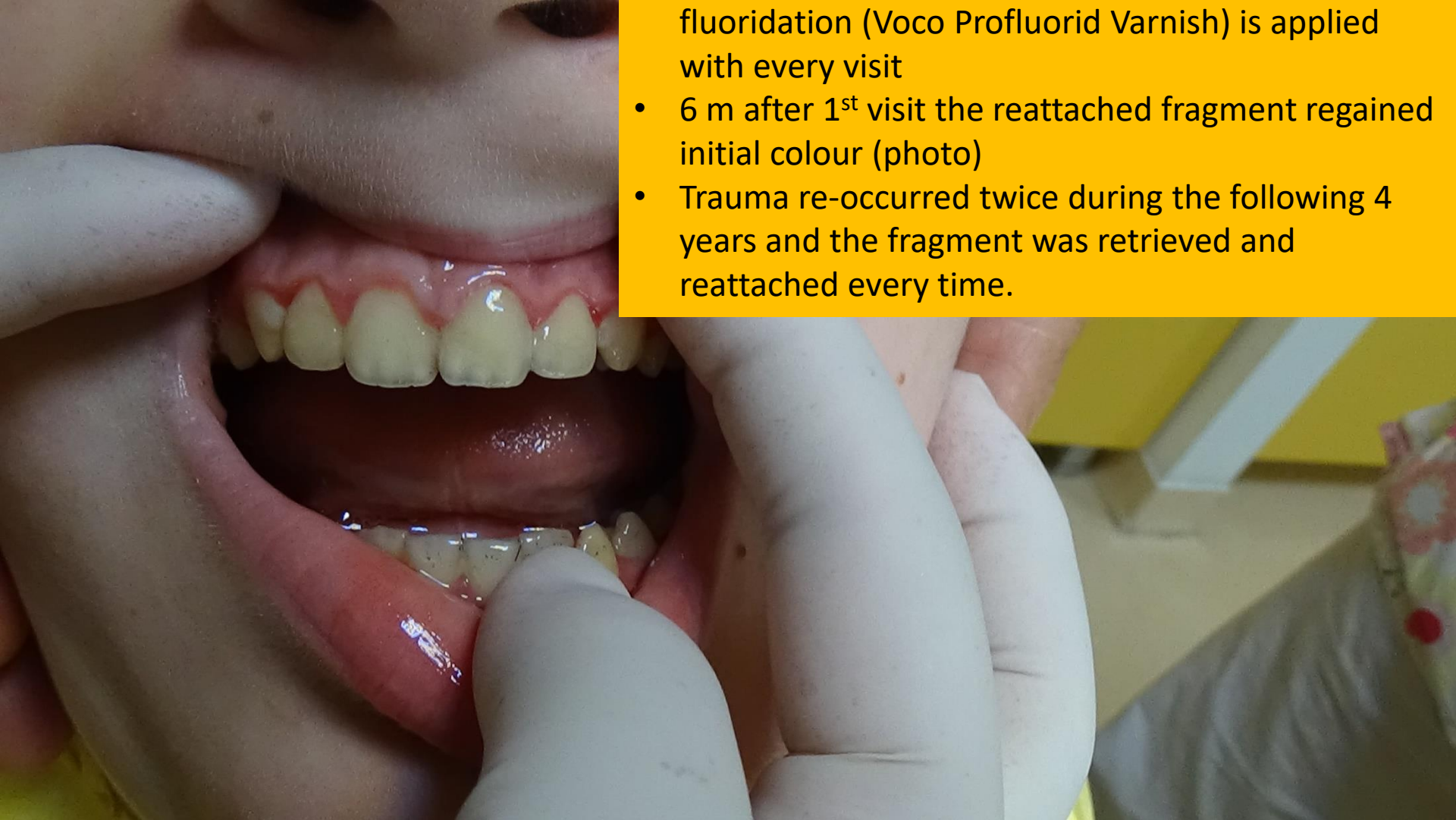


Fractured 21 is restored by fragment reattachment
White discoloration of reattached fragment to be noted



Patient is very happy with the result.



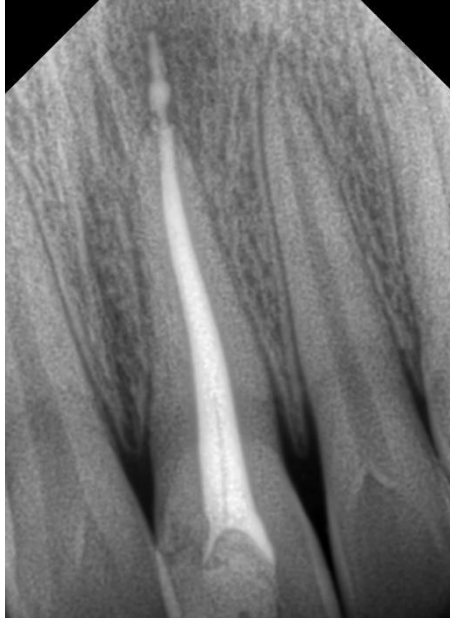


Follow-up:

- 3 m recalls are scheduled for check-ups, professional cleaning and prevention; topical fluoridation (Voco Profluorid Varnish) is applied with every visit
- 6 m after 1st visit the reattached fragment regained initial colour (photo)
- Trauma re-occurred twice during the following 4 years and the fragment was retrieved and reattached every time.



- 4y7m years after the first reattachment, brown discoloration of the crown occurred
- 21 was non-vital
- X-ray revealed periapical radiolucency
- Endodontic treatment is initiated
- Calcium hydroxide dressing is applied, followed by ZnO-eugenol root canal filling (chosen for the antimicrobial properties of eugenol)



3 ½ months later the tooth is asymptomatic and periapical healing is in progress.

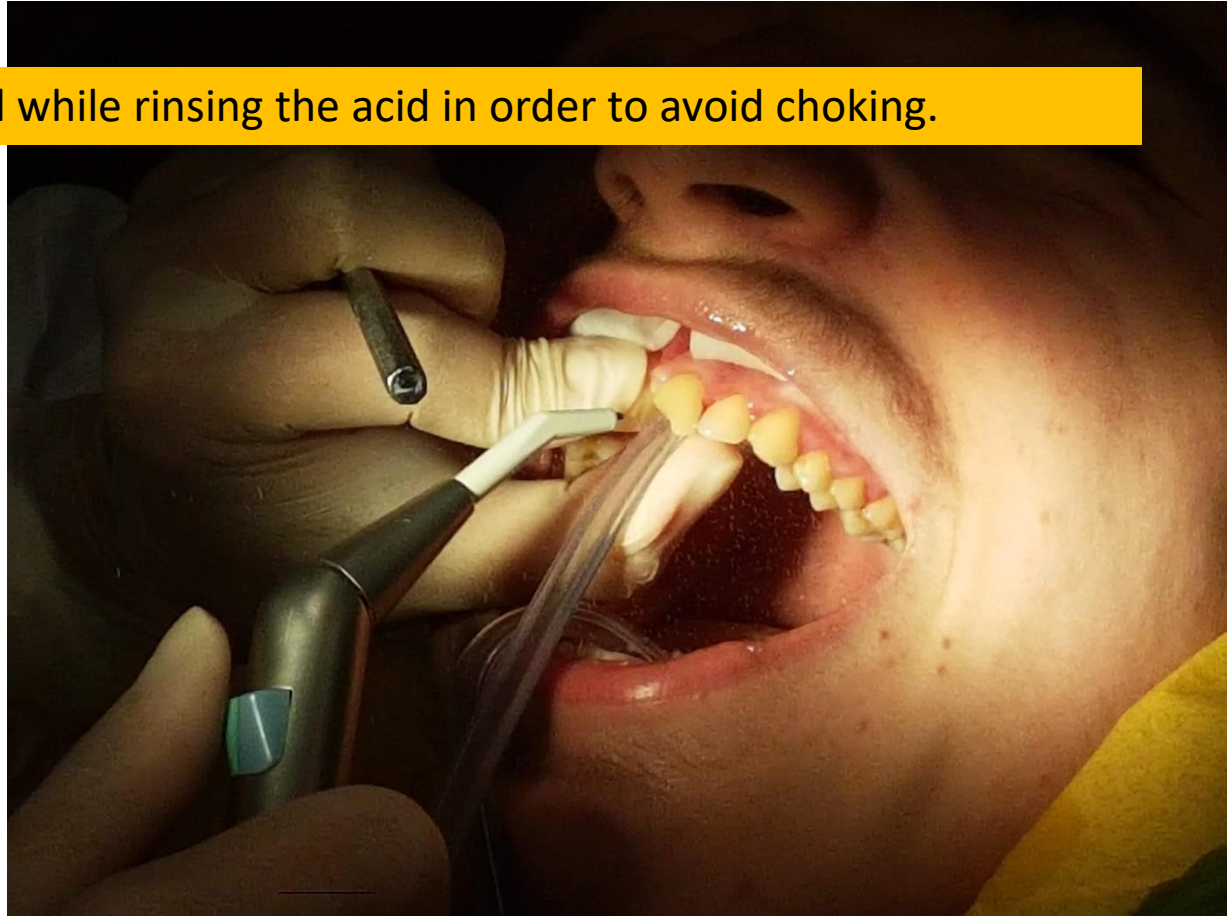
Decision is taken to carry on with a composite crown restoration without a Titanium post → reduce risk of vertical root fracture in case of recurrent trauma.



- Treatment is performed in patient's wheelchair.
- A travel pillow is used as a head rest.
- The mum helps minimize uncontrolled moves.



Close power suction is used while rinsing the acid in order to avoid choking.



Patient is very happy with the result, despite the darker colour.

