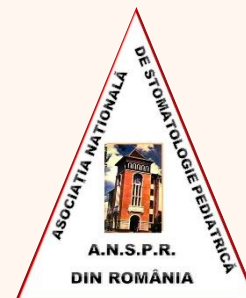




Making the dental office a

***SAFE ENVIRONMENT
for Children with Special Needs***



Regulations

- Regulations differ from one country to another
- Practitioners have to provide physical access to an office:
 - wheelchair ramps
 - disabled parking spaces
 - signage
- USA: failure to accommodate patients with SHCN could be considered discrimination and a violation of federal and/or state law.

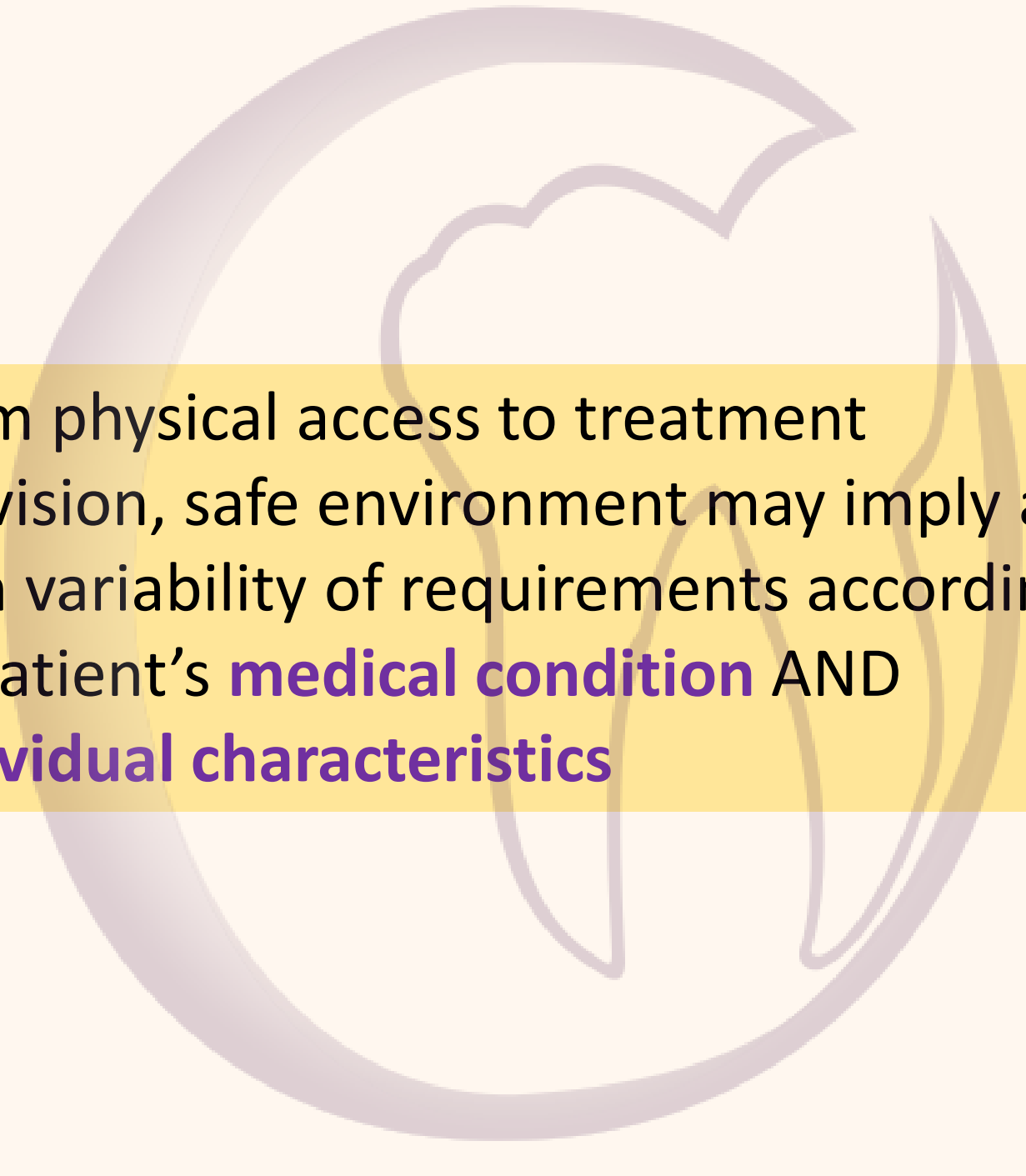


A real challenge for practitioners

- Ergonomic reasons
- Limited training in Special Oral Care; high variability of under- and postgraduate curricula between countries
- Additional equipment for the dental office may be needed
- Reduced availability of the dental team

may result in

Limitation of access to oral care



From physical access to treatment provision, safe environment may imply a high variability of requirements according to patient's **medical condition** AND **individual characteristics**

Visual Disabilities

- Establish the degree of impairment of the visual function
- Avoid expressions of pity / compassion
- Detailed and “vivid” description of the dental office
- Detailed description of the procedures and tools used
- Encourage to ask questions about treatment, equipment, dental office

Visual Disabilities

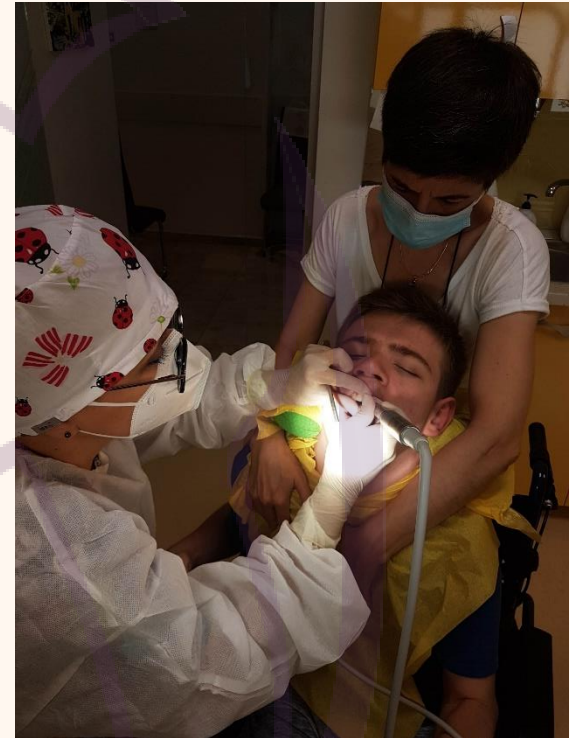
- Maximum use of tactile senses, taste, smell
- Sunglasses as a protection measure
- Audio recordings and headphones for a detailed explanation of the procedure/music to calm down
- Minimize distraction
- Avoid loud sounds

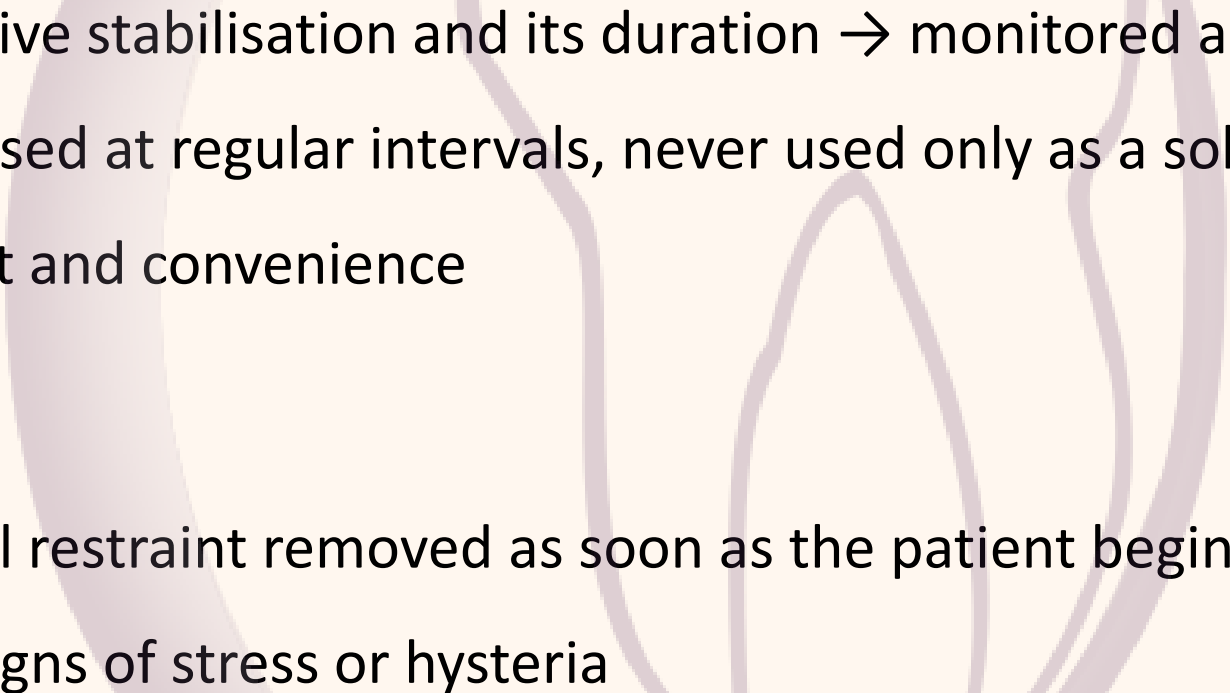
Hearing Disabilities

- Learn a basic sign language
- Face always oriented towards the patient
- Slowly speaking, easy rhythm, avoid lifting the tone
- Avoid exaggerated facial expressions
- Tell-Show-Feel-Do technique
- Avoid blocking the visual field (dam system)
- If using a hearing aid → adjustment should be checked before using handpieces/ultrasound scaling equipment

Physical Disabilities

- Treatment **in wheelchair** when possible
 - parent can help stabilize head position
 - parent's touch - reassuring
- Space and design of the dental office → **easy acces** when using wheelchair
- When **physical restraint** is necessary → details & **informed consent** form is signed



- 
- Protective stabilisation and its duration → monitored and reassessed at regular intervals, never used only as a solution of comfort and convenience
 - Physical restraint removed as soon as the patient begins to show signs of stress or hysteria

Physical support techniques

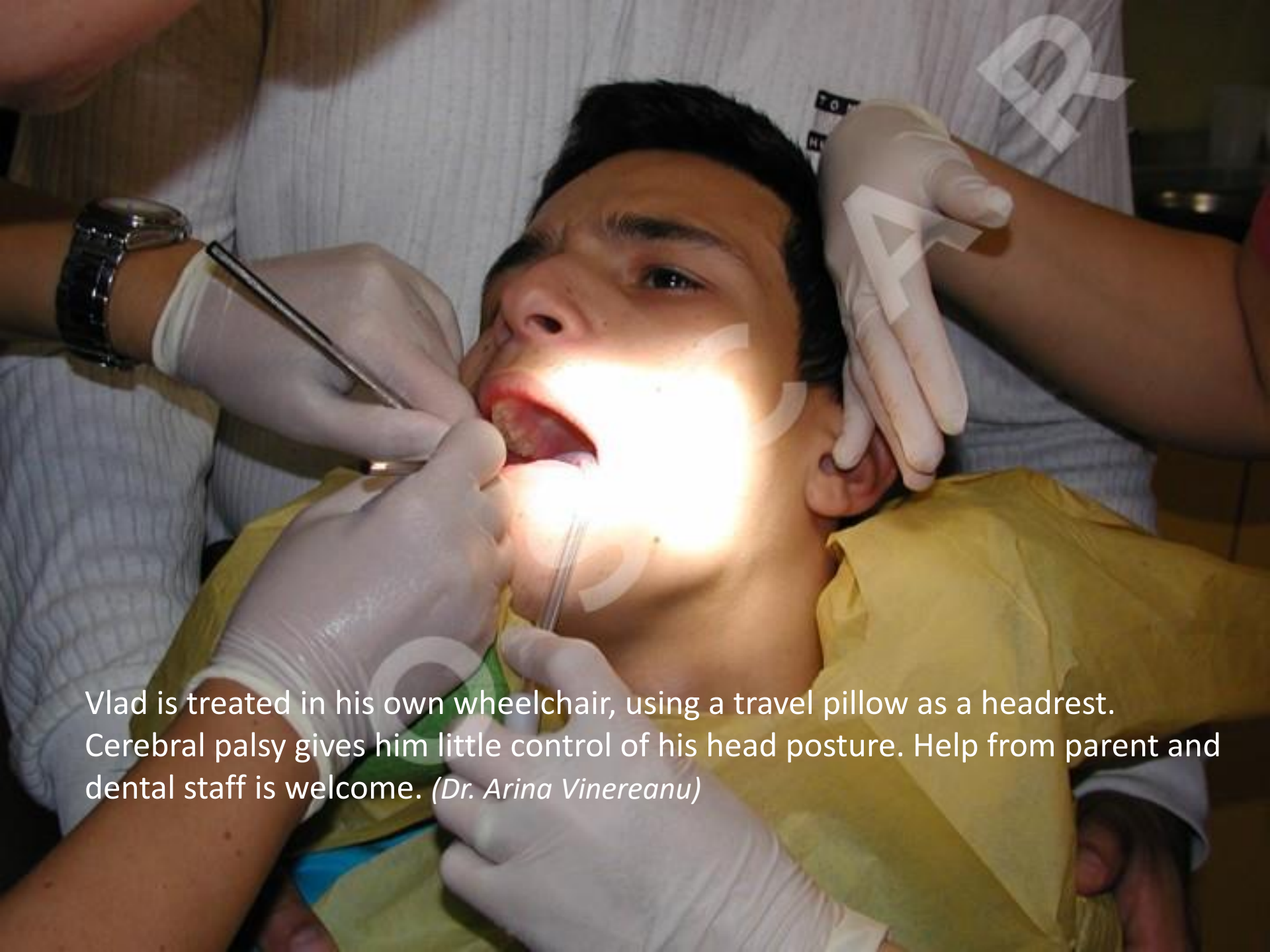
- Holding therapy= suitable for children, the responsible person stabilizes trunk and arms while embracing the child who remain on his/her lap

Raz (Down syndrome) sits on his mom's lap, mom embraces him while holding his arms; dental nurse is near, able to help if needed; dentist conceals instruments and is telling a story while performing quick clinical manoeuvres.



Physical support techniques

- 'Knee to knee' = suitable for children 1-3 years old, dentist and responsible person have their knees in contact forming a kind of hammock
- Auxiliary personnel holds the patient's head = suitable for all ages



Vlad is treated in his own wheelchair, using a travel pillow as a headrest. Cerebral palsy gives him little control of his head posture. Help from parent and dental staff is welcome. *(Dr. Arina Vinereanu)*

Passive immobilization

INFORMED CONSENT from parents is MANDATORY!

- Papoose-board®
- Pedi-wraps®
- Sheets
- Straps
- Seat belts
- Towels
- Wrist bracelets
- Vests



Papoose-board®



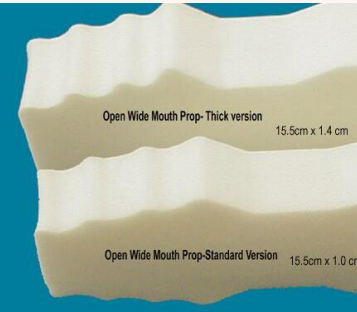
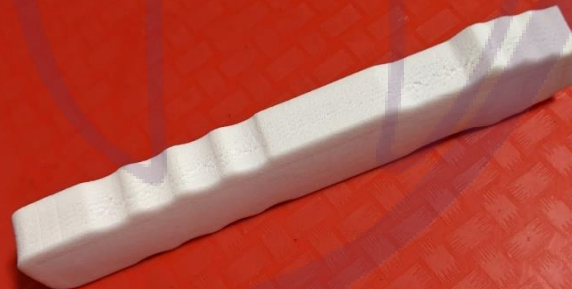
Pedi-wraps®

Mouth props

- Helpful especially in patients with poor coordination (e.g. cerebral palsy) or poor cooperation
- Requires informed consent
- **Precaution:** check the dentition before → loose primary teeth can be dislodged
- **Soft foam mouth props** - less rigid, easy to place, less harmful for anterior teeth, easily deformed



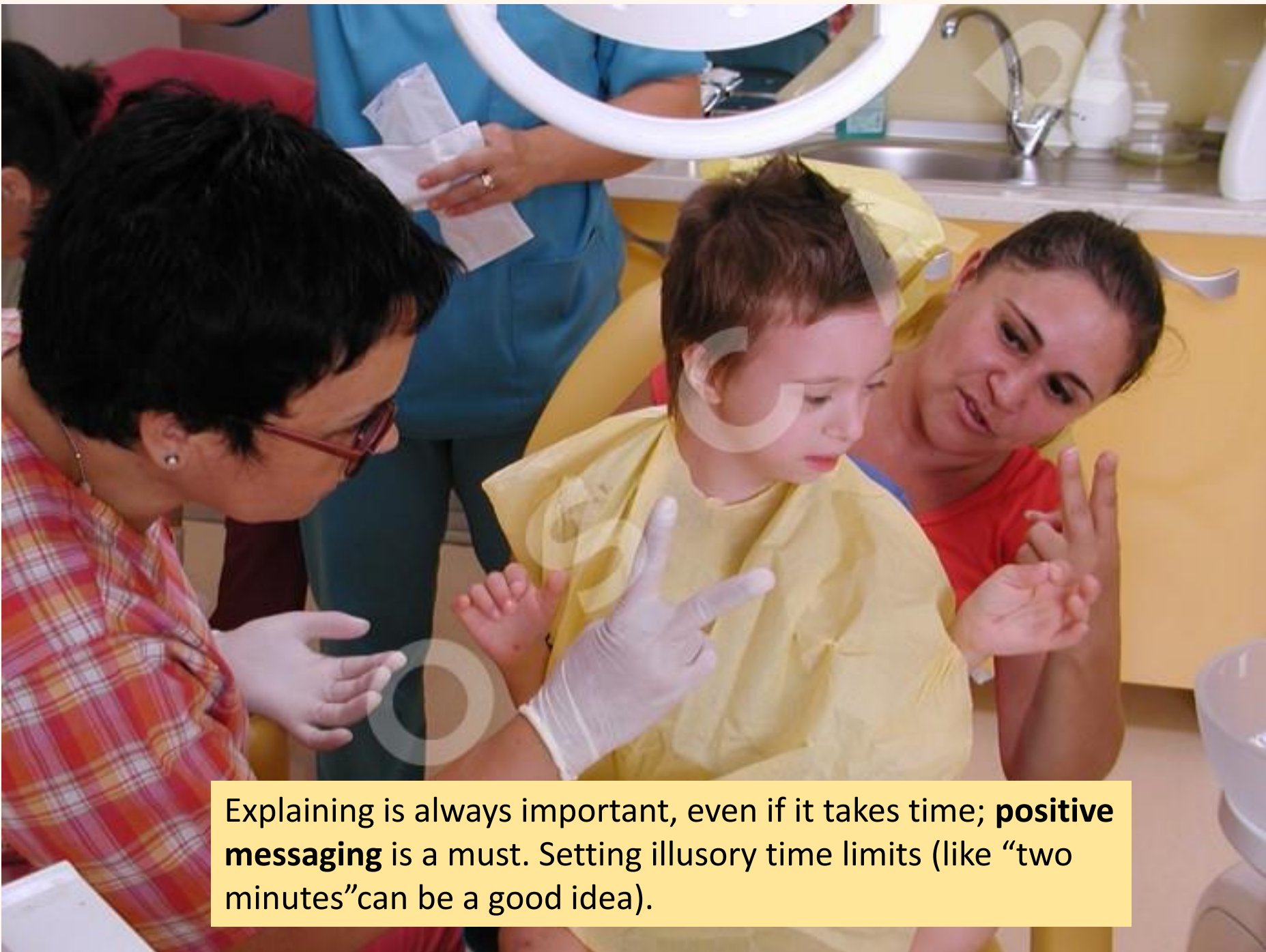
Molt mouth prop™



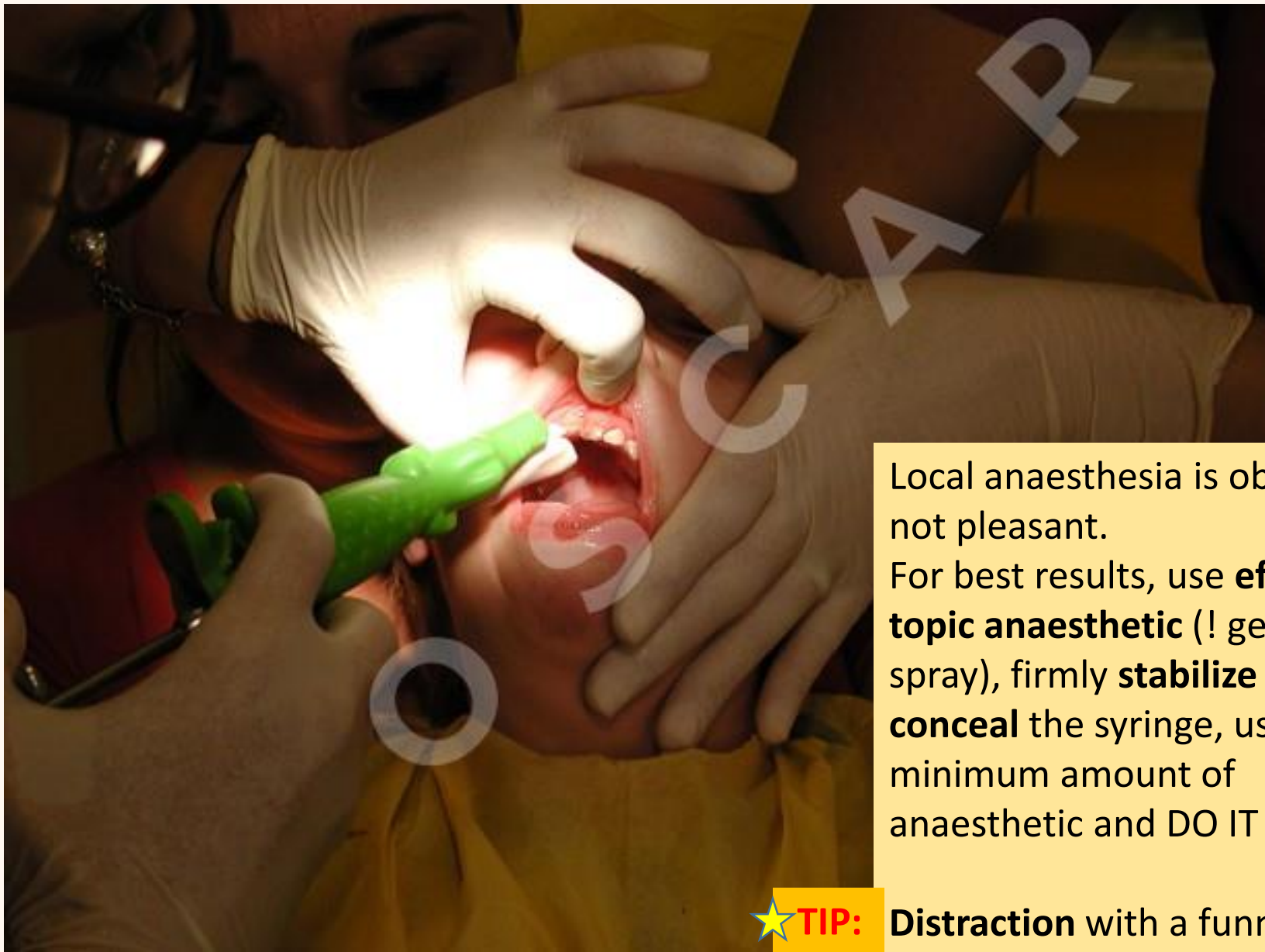
Open Wide® Disposable Mouth Prop

Down Syndrome

- Treatment sessions: pleasant, quiet, joyful, empathetic and at a slow pace
- Explanation of each procedure according to patient's intellectual level
- Extra time to explain the problems of oral cavity
- Instructions & practical demonstrations for toothbrushing technique
- Minimise the external stimuli that can disturb the success of the treatment
- End of treatment session → rewards for their success in finalising the treatment



Explaining is always important, even if it takes time; **positive messaging** is a must. Setting illusory time limits (like “two minutes” can be a good idea).



Local anaesthesia is obviously not pleasant. For best results, use **efficient topic anaesthetic** (! gel, NOT spray), firmly **stabilize** the head, **conceal** the syringe, use the minimum amount of anaesthetic and **DO IT QUICKLY**.



TIP:

Distraction with a funny song or story can help.

With efficient anaesthesia, extraction is quick and uneventful, although physical restraint is definitely not appreciated.



A woman with short dark hair and glasses, wearing a red and white plaid shirt, is seated and using a scalpel to cut a white piggy bank. The piggy bank has a simple face with two eyes and a small smile. A young boy with brown hair, wearing a blue and white polo shirt with "LAKE LAKE" printed on it, is sitting next to her, looking at the piggy bank. A woman in a red shirt is standing behind the boy, also looking at the piggy bank. In the background, a person in blue scrubs is partially visible. The setting appears to be a clinical or hospital room, with a sink and medical supplies visible in the upper right corner. A large, faint watermark "SCA" is overlaid on the image.

All protest is forgotten in anticipation of a nice **reward**.



Raz has earned his reward (a painted glove balloon) after successfully completing his treatment session.



Patient is proud and happy, mom congratulates him.
He will be happy to come back to his *Dental Home*.

Fetal alcohol spectrum disorder

- Use humor, make the exam area feel safe, let the child look at the equipment and instruments
- Prevent distractions (phone, knocks on the door)
- Use full-spectrum lighting (lava lamp)
- Take pictures of the dental office and medical staff to remind the patient of previous visits



Mathmos Lava lamps UK©

Fetal alcohol spectrum disorder

- Tell-show-do technique
- Side effects from various medications → pediatrician consult before the administration of any medication
- Visually, objects on the wall or hanging from the dental lamp can be disturbing
- Use of sunglasses to avoid light glare
- Use of headphones and calming music during treatments (widely perception of the noise)

Schizophrenia

- Approach in a slow and non-threatening manner
- No sudden movements
- Patient should be warned for each stage of the treatment
- Medical history recorded very carefully
- Sedatives used with caution → prevent reactions with the neuroleptic medication (⇒respiratory depression)
- Anesthesia with epinephrine in normotensive patients with no adverse effects



Previously treated under GA, George (dg: schizophrenia) reacts very well to doggy stories. Dental nurse gets all his attention with a funny story about her dog, while dentist takes action. George repeatedly allows himself to be treated in-office, under local anaesthesia. Doggy stories successfully got him through treatment with increasing complexity – from fillings to endodontics, fiber posts and metal-ceramic crowns.

Attention deficit hyperactivity disorder (ADHD)

- Short and clear instructions directly
- Tell-Show-Do technique
- Determine if breaks are needed
- Tell the child what is expected of him / her during the visit
- Small rewards for proper behavior (stickers, etc.)
- Positive reinforcement → favorable treatment attitude
- Sedation when needed

Autism spectrum disorders

- All dental staff = thoughtful, empathetic, aware of how to communicate
- Usually, the dental assistant/hygienist has the first contact with the patient → identification of behaviour's trigger points
- Calm, secure room, reduced decor, less intense lights
- Distraction techniques: watching a favorite cartoon, listening to music, holding special toys
- Decreased exposure to auditory and gustatory stimuli



Busy with his game, S. hardly pays any attention to his treatment session. However, he does respond to dentist's requests.

Autism spectrum disorders

- First appointment \Rightarrow trusting patient-doctor relationship
- Short, well organized appointments
- Short, clear, simple sentences
- Good, continuous communication throughout the visits and even afterwards
- Tell-Show-Do technique
- Images/objects for explanations when language is limited
- Positive reinforcement

Acute leukemia

- Multidisciplinary team: oncologists, nurses, dentists, social workers, nutritionists
- Basic health care → good oral health, low risk of systemic infections of oral origin

Acute leukemia - **pre**-antineoplastic treatment

- Identify and eliminate sources of existing/potential infection without promoting complications/delaying therapy
- Oral health education of the patient/relatives
- Warn about possible effects of antineoplastic therapy in the oral cavity (mucositis, etc)

Acute leukemia - oral health care **during** antineoplastic treatment

- Maintain optimal oral health
- Treat side effects of antineoplastic therapy - mucositis
- Reinforce the importance of oral health in reducing problems/discomforts arising from chemotherapy

Haemophilia

- Avoid brusque maneuvers during dental treatment
- Prevent accidental damage to the oral mucosa (saliva ejectors, placement of X-ray films)
- Attention when using matrix bands, rubber dam, wooden edges → risk of bleeding
- Resorbable sutures
- Tests and precautionary measures-Hep B/C, HIV, parvovirus

Epilepsy

- Appointments in the morning → patients are less tired
- Check if the patient has eaten before and has taken his regular medication
- Medical and seizure history obligatory!
- Medication history checked every time → frequent changes = poor control → reschedule non-urgent treatments
- Avoid drugs that can interact with antiepileptic medication
(metronidazole, antifungal agents; miconazole, fluconazole, aspirin, non-steroidal anti-inflammatory drugs, erythromycin)

Epilepsy

- Regular check up, careful treatment planning to avoid dental pain and infections
- Attention when sedating patients that are taking benzodiazepines (incl. clobazam, clonazepam)
 - may exhibit high tolerance to midazolam / adding effect, over-sedation
- G.A.: maintain anti-epileptic medication during perioperative period
- Dental team training in seizure management

Epilepsy

Management of a seizure in the dental office (1):

- Stop the treatment. Instruments and dental tampons should be removed.
- Move away the equipment. Place patient in supine position.
- Don't place your fingers in patient's mouth → can be bitten/broken.
- Loose any tight clothing. It's not necessary to restrain the patient.
- If the patient has aura → place gauze tampons in the mouth to prevent teeth injuries
- Sometimes patients sleep deeply after seizure → recovery position and monitored. When they are alert, can go home only accompanied.

Epilepsy

Management of a seizure in the dental office (2):

- Seizure > 3 minutes / recurrence → drug administration: Diazepam 10-20 mg i.m. or Midazolam 10 mg i.m.
- Some patients carry Midazolam that can be placed intraorally for rapid absorption through mucosa.
- Oxygen isn't necessary if the seizure episode is short
- If the seizure continues after drug administration or restarts → administer oxygen and call 112