

Adapting Dental Care for Patients with Autism Spectrum Disorders

Modified routine dental procedures to suit patient needs and improve outcome



Hypersensitivity to sights and sounds, unfamiliar settings, and anxiety can prevent individuals with autism spectrum disorders (ASD) from receiving adequate dental care



40% of children with ASD are hypersensitive to sound and have a low pain threshold¹



Suboptimal oral care significantly increases the risk of oral health problems in children with ASD¹



Techniques such as desensitisation, symbolic remodelling, and positive reinforcement along with sophisticated behavioural guidance techniques, and a dental team trained in caring for patients with ASD can facilitate the dental care of patients with ASD¹



A study found 45% children required general anaesthesia for dental treatment²

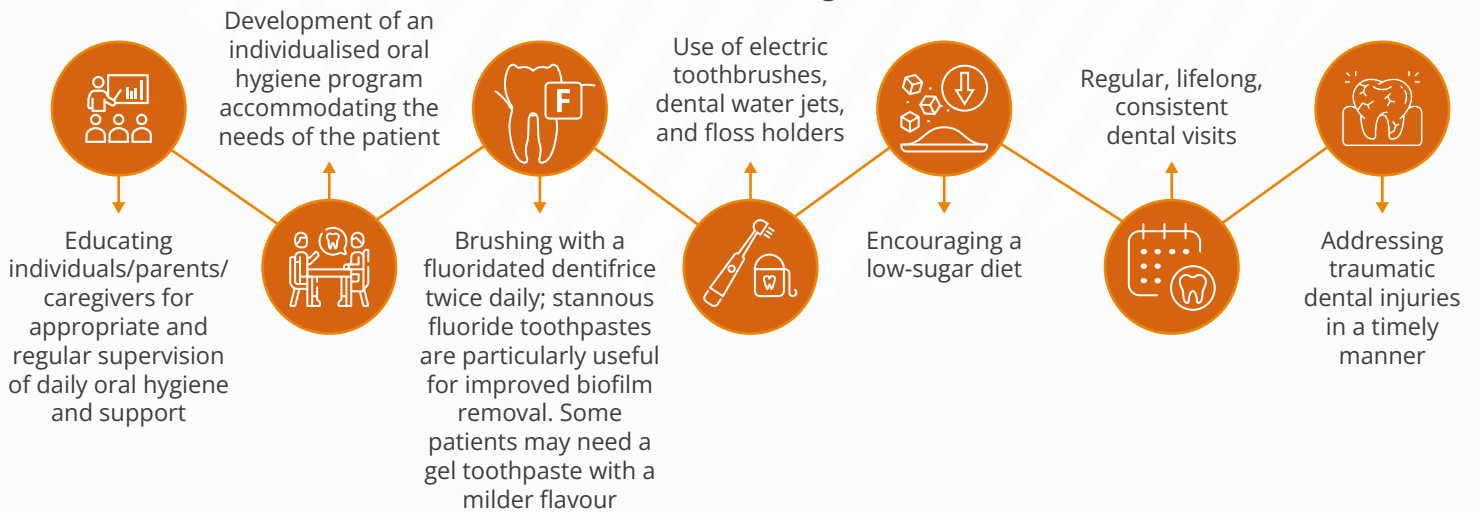


For children with ASD²
Nitrous oxide/oxygen inhalation may be required for dental treatment with good behavioural management or in some cases general anaesthesia



For adults
Inhalation sedation, intravenous sedation, or general anaesthesia along with good behavioural management may be needed to facilitate dental care

Preventive strategies³



Establishing dental visits for children with ASD by 12 months of age can be crucial in providing them with adequate and comprehensive dental care³

Dental homes provide:



Accessible care



Coordinated and regular visits



Family-centred treatment approach



Children with ASD reaching adulthood need continuous oral healthcare, which may be beyond the scope of the paediatric dentist's practice, necessitating a coordinated transition from a paediatric to an adult dental home

Adapting the care environment and dental procedures for individuals with ASD



Individuals with ASD, especially those who are hypersensitive to sensory stimuli, are more likely to experience anxiety in dental settings⁴



Sensory-adapted dental environments (SADE) reduce the impact of sensory stimuli on individuals with ASD, reducing anxiety

Strategies for controlling stimuli in SADE

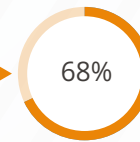


The SADE provides a higher likelihood of successfully treating patients with ASD compared to the regular dental environment (RDE)



of children with ASD were treated successfully in RDE

In a study where the SADE was created using a screen to project movies, soft lighting, and noise reduction⁴:



of children in the same cohort were successfully treated in SADE

Using pictograms to improve oral health outcomes in children with ASD

The Treatment and Education of Autistic Children TEACCH method involves tailoring the dental environment to^{5,6}:



Reduce behavioural disturbances



Foster predictable routines in the care setting



Encourage independence in performing tasks

Visual tools can enhance the TEACCH method in several ways⁶

Visiting dental professionals



Regular dental, visual aids: visiting the dental professional⁵

Adapted from Aljoubour *et al.* (2022). DOI: 10.3390/children9050666



Visual schedules streamline dental visits



Pictograms aid in explaining procedures step-by-step



Pictures help familiarise patients with the dental care environment

Visit <https://oralhealth.knowledgehub.wiley.com/special-healthcare-needs-autism/> for additional resources

Treatment outcomes for patients with ASD can be improved by paying attention to individual needs at each step³



Patient assessment³

Learn about specific anxieties and triggers of individual patients

Ensure familiarity with the patient's medical history

Preparing patients³

Ask questions to understand oral health needs and set expectations

Obtain informed consent from the patient or, if they do not have the capacity to consent, follow the principles of best interest, discussing with family/carers

Familiarising patients with the dental environment

- Allow gradual exposure to the dental environment or provide the patient with pictures of the dental clinic and the doctor
- Establish trust and familiarity and develop a relationship

Accommodating individual patient needs

- ✓ Pay attention to patient needs during dental procedures
- ✓ Ensure a positive experience for the patient
- ✓ Use non-verbal cues for patients with limited verbal communication skills to elicit appropriate behaviour

Ways to adapt routine dental procedures for patients with ASD

Schedule regular recall visits to monitor patients

Adjust the length and structure of appointments according to patient needs

Allocate additional time for the dental team to work with the patient

Schedule an informal visit before the actual visit to familiarise the patient with the dental office environment

Make children with ASD comfortable and safe by using simple tools like social stories, visual schedules, or role-playing games, or encouraging accompaniment by a non-autistic sibling and demonstrating the procedure to them

Reduce movements to avoid distraction

Use distraction techniques, such as favourite toys, music, or videos

Use simple and short sentences or words

Avoid providing too much information and instructions at once

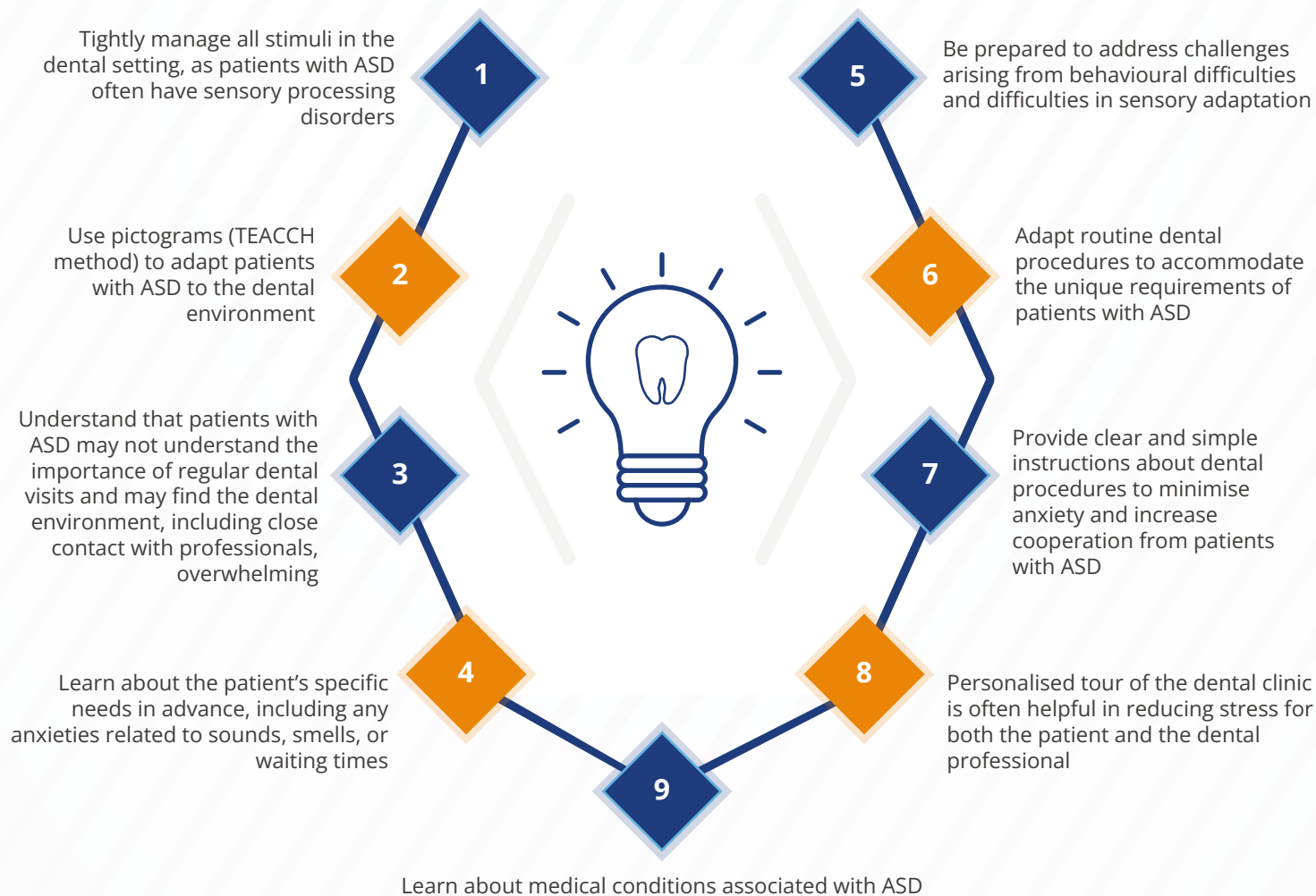
Some patients may require pharmaceutical interventions such as sedation and general anaesthesia to reduce the level of anxiety and increase the pain threshold⁷

Implement desensitisation techniques gradually over multiple visits

Follow a precise scheme in order to submit patients to a safe sedation

Sedative and anaesthetic agents: midazolam, propofol, dexmedetomidine, ketamine, and fentanyl citrate

Key suggestions for dental professionals working with patients with ASD



Key message

These strategies can be effective in establishing a dental home and ensuring a comfortable and effective experience for patients with ASD while providing them with the necessary dental care

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