Asthma is a chronic respiratory disease associated with airway obstruction, with recurrent attacks of paroxysmal dyspnea, and wheezing due to spasmodic contraction of the bronchi. (ICD 9 code 493.2)

Allergy is a hypersensitivity to an agent caused by an immunologic response to an initial exposure. (ICD 9 code 995.3)

Oral Manifestations and Considerations

Oral
- Increased caries risk, enamel defects
- Increased gingivitis and periodontal disease risk; and more calculus
- Higher rates of malocclusion and increased: overjet, overbite, posterior crossbite; high palatal vault
- Oral candidiasis, xerostomia, decreased salivary flow rate and salivary pH

Other Potential Disorders/Concerns
- none

Oral Side Effects of Commonly Prescribed Medications

<table>
<thead>
<tr>
<th>Medication</th>
<th>SYMPTOM</th>
<th>MEDICATION</th>
<th>SIDE EFFECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breathing difficulties</td>
<td>A. Bronchodilators (B2-agonists)</td>
<td>A. Oral candidiasis, xerostomia, decreased salivary flow rate</td>
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<tr>
<td></td>
<td>B. Corticosteroids</td>
<td>B. Oral candidiasis, dental caries</td>
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<td></td>
<td>C. Antihistamines</td>
<td>C. Xerostomia</td>
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<td></td>
<td>D. Decongestants</td>
<td>D. Xerostomia</td>
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</tbody>
</table>

Sedation
- Hydroxyzine and benzodiazepines recommended; avoid narcotics and barbiturates due to their histamine releasing properties → bronchospasm and potentiated allergic response.

Intravenous sedation
- Use extreme caution due to limited control of the airway.

Avoid
- aspirin, other salicylates and NSAIDS (due to allergies). May provoke a severe exacerbation of bronchoconstriction; use acetaminophen.
**Parent/Caregiver Support and Guidance**

- Prescribe EpiPen for a child with a severe allergy and remind child and parent to take EpiPen to dental visits.
- Recommend rinsing with water thoroughly after using inhaler and taking each dose of sugar containing medication. Advise frequent water intake for patients taking xerostomic medication.
- Discourage consumption of cariogenic foods and beverages.
- Prescribe sugar-free medications, if available.
- Recommend preventive measures such as topical fluoride and sealants. Support the family in following dental care instructions.
- Advise the use of fluoridated toothpaste twice daily.
- Instruct caregiver on appropriate protocol following dental trauma (locate/preserve missing tooth and put in cold milk; seek immediate professional care).
- Review safety issues appropriate to the age of the child, such as mouth guards to prevent oral-facial trauma.
- Discuss habits that may harm the child’s teeth, such as propping baby bottles, putting child to bed with bottle.
- Refer to dentist any oral developmental abnormalities.

**Additional information:** Special Needs Fact Sheets for Providers and Caregivers

**References**


**Additional Resources**

- NIH Institute for Asthma and Allergies
- Special Care: an Oral Health Professionals Guide to Serving Young Children with Special Health Care Needs
- Bright Futures Oral Health Pocket Guide
- American Academy of Pediatrics Oral Health Initiative
- MCH Resource Center
- ASTDD-Special Needs
- Block Oral Disease, MA
- NOHIC-NIDCR publications