



AMERICAN BOARD OF PEDIATRIC DENTISTRY

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recognized by the American Dental Association

Oral Clinical Examination Sample Vignettes

Disclaimer

- ✓ The following sample vignettes were composed by ABPD and are intended to be used to assist candidates as they prepare for the Oral Clinical Examination.
- ✓ All content within the sample vignettes is reviewed periodically, but as policies and guidelines change it is important to understand it is the candidate's responsibility to confirm content is up to date and accurate.
- ✓ Utilizing these as study materials does not guarantee a candidate will pass the examination.

Exam Information

The examination is composed of two one-hour sessions and consists of clinical vignettes that are presented to the candidate for discussion. The topic areas covered:

- ▶ Comprehensive Care
- ▶ Hospital Dentistry
- ▶ Behavior Guidance
- ▶ Management of the Developing Occlusion
- ▶ Oral Pathology
- ▶ Prevention
- ▶ Special Health Care Needs
- ▶ Trauma

The candidate will be presented a brief introduction of the patient to be discussed, followed by a series of questions regarding the patient's medical/dental history, diagnosis and treatment options.

Many, but not all, cases will include images projected on a flat-panel monitor. The candidate will be permitted to ask questions about the patient and request that an image or images be revisited.

Examiners utilize 'open-ended' questions to assess the candidate's knowledge and skills. Candidates will benefit by giving evidenced-based answers and occasionally citing references to support rationale. Candidates will be expected to have evidenced-based knowledge of all currently acceptable therapy whether they perform the procedures in practice or not and in all types of pediatric patients.

The ABPD utilizes the following criteria for scoring.
Questions and acceptable answers are developed for each of the 'Skill Sets' of a vignette.

Candidates receive a score for each of these Skill Sets:

1. Data Gathering/Diagnosis
2. Management/Treatment Planning
3. Treatment Variations/Complications

Scoring Categories are as follows:

- 4 - Demonstrates full and in-depth understanding of the application of the skill within the context of the case.
- 3 - Demonstrates use of the skill appropriately within the context of the case.
- 2 - Demonstrates less than full understanding of the application of the skill to the case.
- 1 - Demonstrates wrong or inappropriate understanding of the application of the skill to the case.



Sample Vignette – 1

Oral Pathology

Opening Scenario

A healthy 5 year 2-month-old child was referred to you by a general dentist. During your examination, you find the upper right without erupted dentition. The mother provides a history of the child never having teeth there.



Data Gathering and Diagnosis

The slide features a white background with the title 'Data Gathering and Diagnosis' centered in a purple serif font. On the right side, there is a decorative graphic consisting of several overlapping, semi-transparent purple triangles and polygons of various shades, creating a complex geometric pattern. A thin purple line also extends from the bottom right towards the center of the slide.

What initial information would you gather to evaluate this patient?

A proficient response may include:

- ▶ Medical, Dental, Social history
- ▶ Family history of similar situation
- ▶ Intra/extraoral examination
- ▶ Radiographs
- ▶ Caries risk assessment, behavior

Please describe your clinical findings

A proficient response may include:

- ▶ Teeth #C, D, E not clinically present
- ▶ Fistula, tooth fragments or bone in upper right edentulous area
- ▶ Tooth B missing
- ▶ Midline shift
- ▶ Healthy gingiva

What radiographs will you obtain and why?

A proficient response may include:

- ▶ Panoramic or maxillary occlusal
- ▶ PA upper right
- ▶ 2 Bitewings
- ▶ Cone-beam Computed Tomography (CBCT)
- ▶ Clinically missing primary teeth and etiology unknown

The general dentist did not forward radiographs and you obtain the following views.





Describe what you see in these radiographs.

A proficient response may include:

- ▶ Malformed #6, 7, 8 with abnormally thin enamel, dentin, root formation
- ▶ Absence of #C, D, E clinically, "ghost teeth" in root appearance in that area
- ▶ Normal development of mandibular dentition
- ▶ Teeth #3, A are possibly malformed
- ▶ #5 appears present (possibly #4)

What is your differential diagnosis?

A proficient response may include:

- ▶ Regional odontodysplasia
- ▶ Radiation sequelae
- ▶ Vitamin D-resistant rickets
- ▶ Hypoparathyroidism
- ▶ Pseudohypoparathyroidism
- ▶ Odontomas, trauma

Treatment Plan and Management

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How will you manage this child's dental needs?

A proficient response may include:

- ▶ Removable partial denture, or Hawley appliance
- ▶ Observation without immediate treatment

Should the involved unerupted teeth be extracted and what issues should be considered?

A proficient response may include:

- ▶ Extraction is not preferred to preserve alveolar bone for future implants
- ▶ Consider growth and development, eruption status of malformed teeth, presence of pathology

What is the long-term management plan for this patient?

A proficient response may include:

- ▶ Orthodontic considerations
- ▶ Surgical/prosthetic considerations, implants, fixed vs. removable

Treatment Variation and Complications



You remove calculus on the lower incisors using an ultrasonic scaler which causes bleeding. After doing so, the mother states the child requires antibiotics for dental cleanings due to a heart condition that she forgot to mention.

What is your plan at this time?

A proficient response may include:

- ▶ Ask nature of cardiac defect
- ▶ Consult with cardiologist
- ▶ You can administer antibiotic prophylaxis within 2 hours after treatment is completed

Per the most recent AHA guidelines, if a child is receiving long-term antibiotics and also needs SBE prophylaxis, how should you proceed?

A proficient response may include:

- ▶ Prescribe a different class of antibiotics such as clindamycin (20 mg/kg) PO 1 hour prior to dental procedures

What local measures can be taken to protect the high-risk patient in addition to prescribing systemic antibiotics?

A proficient response may include:

- ▶ Improving oral hygiene to reduce bacteria
- ▶ Rinsing the mouth or swabbing the tissues with Chlorhexidine gluconate 0.12%

Sample Vignette - 2

Patient 1



Opening scenario

The mother of an 8.5-year-old patient in your practice is calling you from the swimming pool reporting her child fell and knocked out one of the upper permanent front teeth. She wants to know what to do?

What immediate information do you need to obtain?

A proficient response may include:

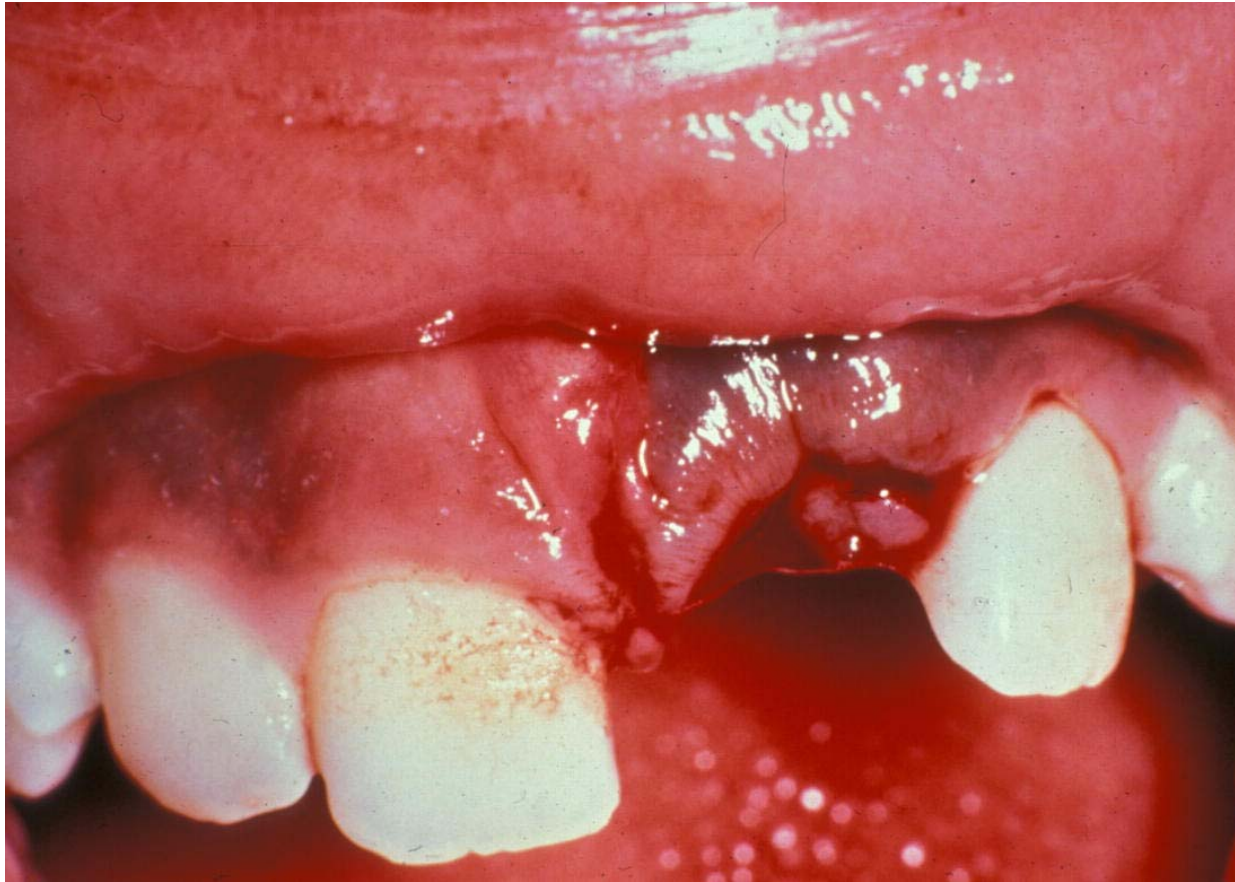
- ▶ Presence of other injuries, loss of consciousness
- ▶ Has the tooth been retrieved
- ▶ Duration the tooth been out of the mouth
- ▶ Indications for the ER, neurologic, other trauma, tetanus status

What recommendations do you suggest for the avulsed tooth at this time?

A proficient response may include:

- ▶ Self-replantation immediately vs. placing the tooth in milk, HBSS or saliva
- ▶ Replantation ASAP, keep extra-oral dry time <60 min

The mother put the tooth in milk promptly after the trauma and presents at your office in 30 minutes.



What are your next steps to manage the trauma?

A proficient response may include:

- ▶ Medical history, Dental history: extra/intraoral examination
- ▶ Radiographs: occlusal, PA, lateral view from the mesial or distal of the tooth in question
- ▶ Local anesthesia, replantation, place flexible splint
- ▶ Complete trauma form

What antibiotic is recommended?

A proficient response may include:

- ▶ Penicillin or amoxicillin (50 mg/kg/day) q 8 hours for 7 days

When do you plan to reevaluate this patient and why?

A proficient response may include:

- ▶ 10-14 days for possible splint removal; monitoring for mobility, pathology

What are your post op instructions?

A proficient response may include:

- ▶ Antibiotics, pain meds prn, Chlorhexidine gluconate 0.12%
- ▶ Soft diet, avoid contact sports, follow-up

Patient 2



A 2-year-old boy fell the day before at home hitting his mouth on the coffee table. Mom reports bleeding from the mouth and gave acetaminophen (Tylenol®).



How do you proceed?

A proficient response may include:

- ▶ Medical history
- ▶ Neurologic assessment
- ▶ Extra/intraoral examination
- ▶ PA, lateral film to rule out involvement of permanent tooth bud

What is your diagnosis and your clinical considerations regarding allowing spontaneous re-eruption vs extraction?

A proficient response may include:

- ▶ Intrusive luxation
- ▶ Monitoring for re-eruption if root towards buccal plate; extraction if towards lingual direction (tooth bud)

If the re-erupted tooth turns dark, what is your plan and rationale?

A proficient response may include:

- ▶ Monitoring for clinical and radiographic signs and symptoms of pathology
- ▶ Extraction with pathology: mobility, sinus tract, swelling, pain, pathologic resorption

List possible implications for permanent teeth due to early trauma to the primary dentition?

A proficient response may include:

- ▶ Enamel hypoplasia
- ▶ Crown/root dilaceration
- ▶ Ectopic eruption



Patient 3



This 10-year-old boy presents with a concern about the difference in height of his front teeth due to trauma 3 years ago with intrusion of the upper right central incisor and root fracture of the upper left central incisor. Root canals were completed, and a splint placed.



How do you proceed dentally?

A proficient response may include:

- ▶ Clinical exam
- ▶ PA of #8,9, splint removal



Tooth #8 exhibits no mobility and upon percussion there is a dull sound compared to the other teeth.

What is your diagnosis for #8 and the clinical implications?

A proficient response may include:

- ▶ Ankylosis #8, loss of pdl space and lamina dura
- ▶ Infraocclusion, space loss, unesthetic



What is decoronation and how do you perform the procedure for this patient?

A proficient response may include:

- ▶ Surgical removal of crown below CEJ, stimulation of internal replacement root resorption process by removing the root canal obturation, grinding inner wall of the pulp chamber stimulating canal filling with blood



Sample Vignette – 3

Imageless Case

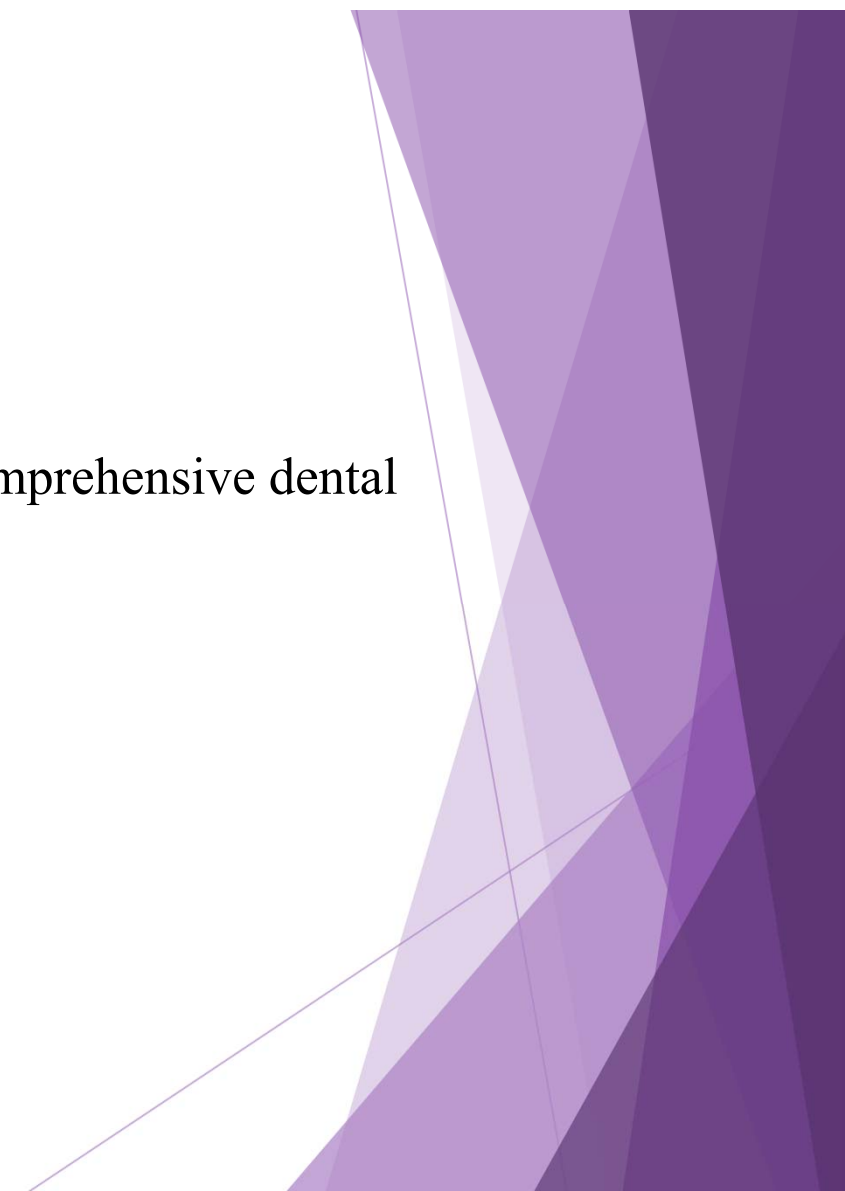
Data Gathering and Diagnosis

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Opening scenario

A 4-year-6-month old girl presents to your office for comprehensive dental care. The family speaks limited English.

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How do you proceed with your assessment of this patient?

A proficient response may include:

- ▶ Interpreter needed for adequate communication
- ▶ Medical history, dental history, social history

With aid from an interpreter, you learn that the child lives with both parents and two sisters. She has epilepsy and takes 15 mg/kg of carbamazepine suspension (Tegretol®) twice daily. She had cardiac surgery during infancy to repair a patent ductus arteriosus.

What follow up questions do you have for the parents?

A proficient response may include:

- ▶ Last visit with cardiology and neurology
- ▶ Compliance and effectiveness of the epileptic medications
- ▶ Type and frequency of seizures, hx of status, seizure triggers
- ▶ Allergies to medications

After further discussion you learn she has a history of developmental delay and speaks only 1 or 2 words. She expresses her wants by pointing and grunting. Cooperation is limited and her parents have difficulty with oral hygiene at home.

Your clinical exam reveals multiple carious anterior and posterior teeth. What other information do you need to develop a comprehensive dental treatment plan?

A proficient response may include:

- ▶ Bitewings (with closed contacts), posterior PAs, maxillary/mandibular PAs/occlusal (if behavior allows)
- ▶ Caries risk assessment (fluoride, diet, oral hygiene)
- ▶ Presence of pain, infection
- ▶ Behavioral compliance at health care visits
- ▶ Evaluation of occlusion

What ASA Classification would you assign this patient and why?

A proficient response may include:

- ▶ ASA III: moderately severe systemic disease that limits activity, but not incapacitating

Treatment Plan and Management

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How do you proceed with treatment for this patient and why?

A proficient response may include:

- ▶ Comprehensive care under general anesthesia due to medical history and treatment needs

Describe your pre-operative protocol for general anesthesia.

A proficient response may include:

- ▶ Written Informed consent
- ▶ Preoperative consults with neurologist/cardiologist
- ▶ Updated H & P from primary care provider
- ▶ Patient preparation (NPO orders, plan of care)
- ▶ Consult with anesthesia personnel
- ▶ Written preoperative orders

What are the common side effects of carbamazepine (Tegretol®)?

A proficient response may include:

- ▶ Drowsiness
- ▶ Blurred vision
- ▶ Nausea
- ▶ Ataxia
- ▶ Dry mouth
- ▶ Unsteadiness
- ▶ Loss of balance

Treatment Variation and Complications



During the one week postoperative follow up in your office, the child has a convulsive seizure in your dental chair.

A proficient response may include:

- ▶ Administer 100% oxygen
- ▶ Monitor length of the seizure
- ▶ Position to prevent self injury
- ▶ Monitor airway
- ▶ Obtain emergency medical help if indicated
- ▶ Do not place anything in the mouth
- ▶ Do not restrain movement
- ▶ Turn head and body to the side if possible

During a seizure episode, what are indications to call emergency medical support (911)?

A proficient response may include:

- ▶ Status epilepticus (seizure 5 minutes or longer)
- ▶ Multiple seizures without recovery
- ▶ Airway is compromised
- ▶ Injury occurs
- ▶ Seizure pattern is atypical

What are some of the life-threatening physiologic conditions associated with tonic-clonic seizures?

A proficient response may include:

- ▶ Vomiting with aspiration
- ▶ Cardiac arrhythmias
- ▶ Compromised airway
- ▶ Status epilepticus
- ▶ Hyperthermia
- ▶ Hypertension