Patient Evaluation and Communication

Presented by:
Michelle R. Mould, RDH, MSDH Ed.

Objectives

- Identify a list of questions that should be evaluated and explain why each is significant to the delivery of local anesthetic agents.
- Identify the 2 most common adverse reactions seen as a result of anesthetic administration and explain why they occur.
- Identify medications that may interact with local anesthetic agents or vasoconstrictors and explain how to deal with patients who may be taking these drugs.
- Differentiate between the concepts of relative contraindications and absolute contraindications with regard to the administration of local anesthesia.

Goals of Physical and Psychological Evaluation

Determine:

- Ability to tolerate physical and psychological stresses
- Treatment modifications
- Psychosedation
- Contraindications to administration of local anesthesia

Contraindications

- Relative
  - Drug may be administered after weighing risk to benefit ratio and if alternative drug not available
  - Smallest clinically effective dose should be used
  - Increased likelihood of adverse reaction still present
  - Example?
- Absolute
  - Under no circumstances should the drug be administered due to possibility of toxic or lethal reaction
  - Example?

Malamed, 2004

Anxiety and Stress

- Patients with underlying medical problems may be less able to tolerate stresses associated with dental care
- More likely to experience exacerbation of medical problem: angina pectoris, seizure disorders, asthma
- Must determine severity of condition, medical consultations may be indicated prior to any dental treatment
- Healthy patients may still be affected by anxiety and stress: syncope, hyperventilation

Malamed, 2003, 2004

Physical Evaluation

- Medical history questionnaire
- Physical examination: visual/vital signs/medical risk
- Dialogue history: clarification of significant findings on medical history questionnaire
- Information from these items will allow the clinician to determine the health status of patient, seek medical consultation if needed, and modify treatment if needed

Malamed, 2004
Questions

- Systemic
  - Cardiovascular, blood, seizures, liver, kidney, CNS disorders, respiratory
- Medications
- Possible interactions
- Allergies
  - Sulfites/Bisulfites

ASA Classifications

- Method to estimate medical risk
  - ASA I - normal, healthy patient
  - ASA II - mild systemic disease
  - ASA III - severe systemic disease, limits activity but not incapacitating
  - ASA IV - incapacitating systemic disease, life threatening
  - ASA V - terminally ill, not expected to survive more than 24 hours

Examples of ASA Classifications

- ASA I – health
- ASA II – pregnancy, > 60 years old, healthy but phobic, drug allergy, non-insulin dependent diabetes, well controlled epilepsy, asthma, Bp 140-159 / 90-94
- ASA III – well controlled insulin dependent diabetes, hypo or hyperthyroid, > 5 months post MI or CVA, stable angina, CHF, COPD, Bp 160-199 / 95-114

Examples of ASA Classifications

- ASA IV – unstable angina, < 6 months post MI or CVA, severe CHF or COPD confining patient to wheelchair or supplemental oxygen, uncontrolled epilepsy, diabetes, dysrythmias, Bp 200/115+
- ASA V – end stage disease (cancer, heart, lung, etc.) not expected to live more than 24 hours

Questions

- Have you ever received local anesthetic for any previous medical or dental treatment?
- Did you experience any adverse reactions to the local anesthetic?
- If yes, what adverse reactions did you experience?

Adverse Reactions

- Allergic reaction
- Psychogenic reactions
  - vasodepressor syncope
  - hyperventilation
- Other psychogenic reactions
  - tonic-clonic convulsions
  - bronchospasm
  - angina pectoris
Psychological Evaluation

- Medical history findings
  - Psychiatric care
  - Medications
- Dialogue history
  - Avoidance of treatment for many years
  - “I hate the dentist”
- Visual observation
  - Increased bp and pulse
  - Nervousness
  - Excessive sweating
  - Dilated pupils
  - Stiff posture, arms crossed over, “white knuckle” syndrome

Dental Fear

- Findings from 2004 meta-analysis: studies of behavioral interventions used to treat dental fear
  - 40% ++ adult population are fearful of dental treatment
  - 3-5% dental phobia
- Systematic desensitization, cognitive therapies, educational interventions, iatrosedation, behavior modification

Anxiety reduction techniques

- Sedation
  - Oral
  - Inhalation
  - Combination
- Breathing exercises
- Visualization
- Distraction techniques
  - Video games
  - Music

Group Activity

- Divide into 5 groups
- Review patient scenarios and accompanying medical histories
- Answer questions related to the evaluation of the patient for the administration of local anesthesia
- Re-group and discuss with class

References