Are Some Patients Predisposed to Pain? Genetics, Gender, Anxiety and Clinical Factors Modulating Pain Perception

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Lecture Outline

Background

- Are some patients predisposed to pain?
- Pain: a sensory and emotional experience
- An evidenced based translational review
- Your intellect and your imagination

Pain

Historical concepts of the nociceptive system

- Neuroplasticity
- Controllable and Uncontrollable factors

Genetics and Pain

- Personalized medicine and dentistry
- Influence of genetic factors on pain
- Genetics and analgesics
- Red-headed women and anesthetic requirements
- Recent literature concerning the role of genetics on pain
• Pharmacogenetics
• Personalized therapy
• The doctor-patient relationship
• Genetic/ non-genetic variables influencing response to an analgesic
• The future

Salivary diagnostics

Influence of sex on pain
• Women at increased risk of pain
• Gender bias in research
• Estrogen
• Women and chronic painful diseases
• Sex and medication

Aging and Pain
• An additional demographic group

A basic analgesic strategy

Analgesic Considerations
• When should I start an analgesic?
• Acetaminophen: Caution
• Acetaminophen and asthma link
• Analgesic efficacy
• Ibuprofen controversy
• “Why Vicodin?”
• Analgesic evaluation
• Analgesics and gender

**Anxiety and Pain**

• Anxiety and pain
• Psychological stress and healing
• Pre-operative dialogue

**Flare-ups**

• Validity of specific predictors of exacerbations
• A basic evidence-based pain preventive strategy: occlusal reduction
• Non-vital exacerbations
• Vital exacerbations
• Antibiotics and pain

**The “hot tooth”**

• Soft tissue vs pulpal anesthesia
• The “numb lip”
• Most valid test of local anesthesia
• Local anesthetic strategies
• Nitrous oxide
What is new?

- Intra-nasal anesthesia (Kovanaze
- Influence of demographic factors on patient compliance with post-op orders

Persistent pain following seemingly successful Endodontics

Differential Diagnosis

- Odontogenic vs. non-odontogenic pain

Questions