



Short Communication

Assessment and Management of Pain in Pediatric Dentistry

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Pain is an unpleasant combination of feelings and sensations, which is hard to define. There are several tools for the assessment of pain in children. Once the extent of the pain is assessed, proper non-pharmacological or pharmacological strategies can be applied in the management of pain in children. The purpose of this article is to review briefly the assessment and management of pain in pediatric dentistry.

Key words: Assessment, management, pain, pediatric dentistry

1. INTRODUCTION

Tooth Pain is an unpleasant combination of feelings and sensations, which is hard to define. Assessment of pain is an important part of the history taking and evaluation in dentistry. When symptoms or signs of pain in the oro-facial region is apparent, a detailed assessment of pain should be performed, which helps the dentist to arrive at the clinical diagnosis, and the treatment needs of the patient.

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2. ASSESSMENT OF PAIN

Pain assessment is an important part of pain management and it is difficult to measure pain in children due to its subjective nature. We often rely on the report of the parents for the assessment of pain in children.¹Dental procedural pain can be assessed using behavioral [faces, legs, activity, cry, consolability scale (FLACC) and sound, eye, motor (SEM) scales], self-report measures [facial pain scale-revised (FPS-R), pain thermometer, visual analogue scale (VAS), colour analogue scale etc.] and/or a combination of these approaches.²Pain experienced by children require application of scales that depend on the observations such as sounds, facial expressions, and body movements.^{2,3}

3. MANAGEMENT OF PAIN

The psychological status of the individual is imperative, when assessing pain in a child. The dentist should account for the intensity and duration of pain that may be perceived from a given dental procedure.⁴Management of the dental pain may range from non-pharmacologic measures such as cognitive behavior therapy to the pharmacological measures, based on the duration and intensity. Non-pharmacological behavior measures include, guided imagery, distraction, play therapy, and tell-show-do. Pharmacologic therapy may consist of adequate local anesthesia, anxiolysis, and moderate to deep sedation regimens.⁵

Pain assessment and management in children has improved in the last two decades, due to the improvement in age-appropriate pain assessment tools and a better appreciation of the role of analgesics in children. The most common analgesic agents used in the pain management of children are opioids and non-opioids. Non-opioids and opioids are used in a “step-wise” approach dependent on the severity of pain.⁶ The

WHO analgesic ladder⁷ can be easily adapted to managing any type of pain, in children.

For the treatment of mild pain in children, non-opioid agents such as acetaminophen and non-steroidal anti-inflammatory drugs (NSAIDs) are most commonly used. However, non-opioids have a relatively low analgesic potency and a ceiling effect compared to the opioids. Therefore, non-opioids are often used in combination with an opioid to provide balanced multimodal analgesia to manage moderate to severe pain. By reducing the dose of opioid needed by upto 30%, they can also exert an “opioid-sparing” effect. The patient may experience less adverse effects with this combination, than either analgesic alone.^{8,9}

For the treatment of moderate to severe pain in children, opioids remain the choice. Over the years, many opioid equivalents have been developed, comprising codeine, morphine, hydromorphone and oxycodone. Codeine is one of the most common opioid equivalents used in the treatment of mild to moderate pain in children. Codeine can be given as a single agent or in combination with a non-opioid such as acetaminophen. Codeine is also available in many dosage forms, such as oral liquids that make the administration of codeine easier in children. However, there is growing concern about the safety of codeine use in children,¹⁰ and hence, should be used with caution.

4. CONCLUSION

Children experience pain and exhibit variability in the expression of pain and that inadequate pain management may have significant physical and psychological consequences. Hence, the dental professionals should recognize and assess pain, use non-pharmacologic and pharmacologic strategies to reduce pain experience of children.

5. REFERENCES

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