Patient Cocaine Use: Everything the Dental Professional Should Know

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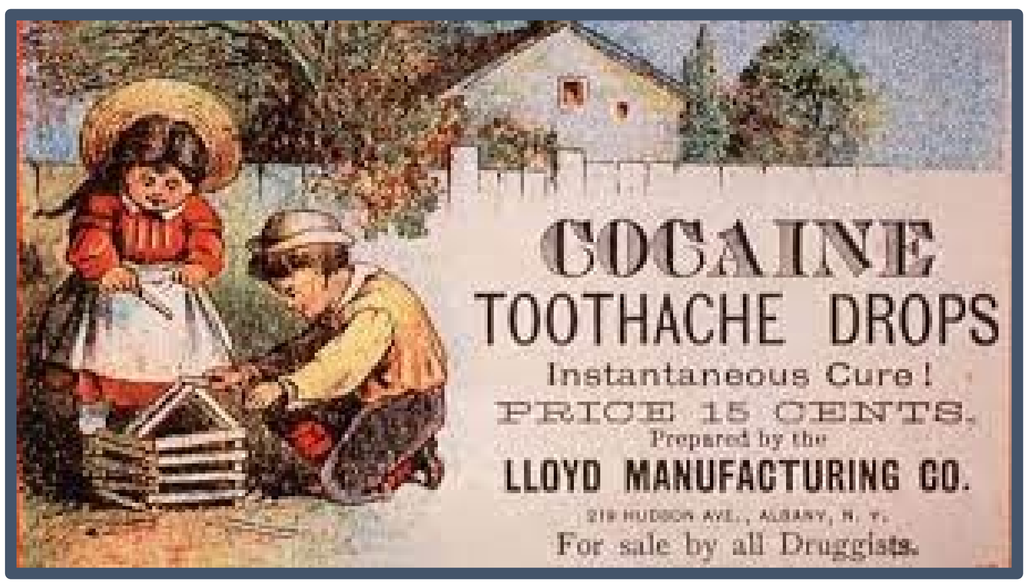
INTRODUCTION/BACKGROUND

The ongoing epidemic of cocaine addiction has become a common social risk factor to oral diseases (Badhila et al., 2020). Over 5 million Americans reported current cocaine use in 2020 (CDC, 2021). Cocaine is a highly addictive stimulant drug that can be snorted, injected, or smoked (CDC, 2021). Users of cocaine may experience a euphoric feeling lasting 20-90 minutes. There are many behavioral and physical effects that can suggest a patient is using cocaine.

HISTORY OF THE MEDICINAL USE OF COCAINE

- Cocaine is derived from the leaves of the Erythroxylon coca (Brand, Gonggrip & Blanksma, 2008).
- The ancient Inca of Peru used Coca leaves for medicinal purposes (Tobe et al., 2018).
- As early as 1855 cocaine was chemically isolated from the Coca plant (Tobe et al., 2018).
- Cocaine was applied as a local anesthetic during human surgery in Vienna in 1884 (Tobe et al., 2018).
- Early on, pharmaceutical trials were conducted to study cocaines many side effects, including addiction (Tobe et al., 2018).



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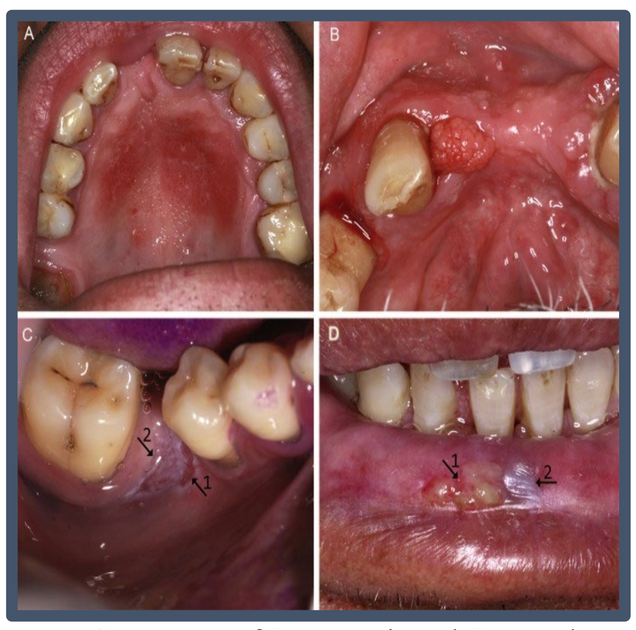
SYMPTOMS AND ORAL MANIFESTATIONS

- **Physical:**
  Dilated pupils, increased heart rate, restlessness (National Institute on Drug Abuse, 2021). Cocaine use may lead to angina, myocardial infarction, or cardiac dysrhythmias (Brand, Gonggrijp, and Blanksma, 2008).
- **Behavioral:**
  Irritability, anxiety, paranoia, violence (National Institute on Drug Abuse, 2021)
- **Oral:**
  Inflamed gingiva, attrition, sensitive teeth, gingival recession, gingivitis, periodontitis, poor oral hygiene accompanied by xerostomia, halitosis, pH imbalance and plaque biofilm accumulation, progressive erosion and shedding of permanent teeth, gingival necrosis, oral lesions, palate perforation (Melo et al. 2021). Oral manifestations may also include nasal septum perforations and nose deformities (Brand, Gonggrijp, and Blanksma, 2008).



Courtesy of International Journal of Oral and Maxillofacial Surgery

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ROLE OF THE DENTAL HYGIENIST

- It is important for the dental hygienist to recognize the physical, behavioral, and oral signs and symptoms of a patient who is using/abusing cocaine.
- The dental hygienist should establish an honest relationship with their patient that includes good listening and open communication.
- Educate patients with an oral hygiene care plan that compensates for the lack of care while under the influence.
- Refer patients to their medical and mental health providers.
- Keeping in close communication with the patient's other health care providers.

CONCLUSION

- Cocaine works similarly to local anesthetics that contain epinephrine. Administering these anesthetics after recent cocaine use can cause an acute increase in BP, convulsions, and may be fatal. Patients must disclose their cocaine use to their providers. Dental treatment should be postponed for 6 to 24 hours after cocaine use (Brand, Gonggrijp, and Blanksma, 2008).
- In order to properly assist the patient, it is important for all dental and medical professionals to understand the major signs of cocaine use, and the impact cocaine has on the patients oral and systemic health.
- With the right education, not only can clinicians help the patient maintain proper oral health, but also have the ability to save many lives by guiding and encouraging the patient to reach out and communicate about their addiction.
- Standardized literature and resources should be available at all health facilities.

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