Gingival/mucosal burns from cocaine use

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Typical Appearance

- Area of superficial sloughing white tissue
- Varying degrees of peripheral inflammation
- Central erosion/ulceration where majority of drug is applied
- If drug is widely applied, there might not be a detectable ulcer/ulceration but white sloughing tissue is usually detectable
Differential Diagnosis

- Application of topical obtundant (aspirin, Ambusol, phenol containing medications, alcohol, tea tree oil, etc.)
- Misuse of alcohol-containing mouthrinses (Listerine, etc.)—because the rinses are liquids, these tend to be more diffuse and involve all of the oral tissues rather than a localized area
- Erosive lichen planus
- Squamous cell carcinoma
Histologic appearance

• “White sloughing material” is coagulation necrosis of superficial epithelial tissues
• Necrosis begins superficially and progresses toward basal cell layer
• Severity of necrosis is dependent upon concentration and duration of application
• Underlying connective tissue might demonstrate acute/chronic infiltration