

The impact of dental treatment and age on salivary cortisol and alpha-amylase levels of patients with varying degrees of dental anxiety

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The purpose of this study was to assess the salivary cortisol and salivary alpha-amylase levels in children aged between 6-9 years. Methods: total of 1567 patients was screened, a total of 151 patients completed the study, patients' heart rate on recall, salivary cortisol and salivary alpha-amylase were compared between the groups. Results: showed that salivary cortisol and salivary alpha-amylase had a significant association with the level of dental fear. The phobic patients had the highest levels of salivary cortisol and salivary alpha-amylase with no significant associations observed with either heart rate or extent of dental treatment. Control and anxious patients had significantly lower amylase levels when compared to phobic patients. Conclusion: within the limitations of this study we can conclude that salivary amylase is an indicator of acute stress that can differentiate between anxiety and dental fear; while salivary cortisol appears to be a marker of long-term stress that lacks the sensitivity to differentiate between the two.

Biography

Majed Almuammar completed his studies at King Abdulaziz medical city- National guard, Saudi Arabia. Majed completed his research work in "The impact of dental treatment and age on salivary cortisol and alpha-amylase levels of patients with varying degrees of dental anxiety".