Screen for Diabetes: Do Not Forget To Examine the Mouth

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Being a clinician involved in both academic and private sectors, I have encountered many cases in which I was the first to incidentally suspect Diabetes (DM) just from examining the mouth of patients referred to me by colleagues (for treatment of other unrelated disorders). Apparently, these colleagues had neglected to examine the oral cavity or if they had examined it, they apparently did not note the oral changes relating to DM. It is imperative that doctors be able to note these changes for early detection and laboratory diagnosis of DM to prevent late complications. Diabetes can affect the whole body; the mouth being no exception. Diabetics face a higher risk of oral health problems due to high Blood Sugar (BS). The less controlled the BS, the more likely the problems. Uncontrolled diabetes impairs WBCs-- the main defense against infections. Diabetics face a higher risk of dry mouth due to decreased salivary flow, resulting in soreness, ulcers, infections and caries [1, 2]. Gum Disease (GD) may ensue because diabetes causes blood vessels to thicken, slowing flow of nutrients to, and waste products from tissues, including the mouth; uncontrolled diabetics experience more severe GD called Periodontal Disease (PD)-- a bacterial infection where gums separate from the teeth. Pockets form between teeth and gums and fill with germs, pus and deepen [1, 2]. When this occurs, periodontal surgery is needed to salvage the teeth. Otherwise, the infection goes on to destroy bone around teeth which may loosen, exfoliate or require extraction. For the 30 million Americans with diabetes, many may be surprised to learn of this unexpected complication associated with diabetes. Research shows an increased prevalence of GD among diabetics, adding serious PD to the list of other associated complications like heart disease, stroke and kidney disease [2]. Uncontrolled diabetics also have poor healing predisposing to various infections especially fungal infection of the mouth and tongue. Fungi thrive on the high levels of sugar in saliva of diabetics. Burning mouth and/or tongue is caused by thrush (candidosis). Smokers with diabetes are at higher risk for thrush and PD [3].

Research suggests that the relationship between serious GD and DM is reciprocal; not only are people with DM more susceptible to serious GD, but GD may have the potential to affect BS control and contribute to the progression of diabetes. Diabetics are at higher risk for oral health problems, thus, clinicians should be sure to always examine the mouth in their practice [2, 3].

References

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