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| **Name:** |
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| 4B-2 |
| **Pathology Question:** |
| What are caries disease indicators and how do they present in the oral cavity |
| **Report:** |
| Dental caries are quite a prominent disease among people today. Much is being done to treat dental caries, but methods of prevention are lacking. There are many indicators that can foresee or predict the progression of Caries in the dentition. Caries is the result of the interaction between specific microorganisms and carbohydrates overtime. Tooth structure tends to remineralize and demineralize. If this balance is thrown off, and there is more demineralization, a lesion will form signifying disease. The caries process can eventually progress into cavitation. These are often treated by operators, even though the lesion can progress and lead to further invasive treatment. With a larger focus on prevention and indicators of the disease process, the amount of invasive treatment can be reduced allowing for a better quality dentition.  In order to combat caries in the dentition, signs need to be looked at that will indicate the disease process. Indicators can be defined as physical signs of dental caries or past caries disease history and activity. These can predict what will happen and thereby show the need for therapeutic intervention. Indicators of the caries disease process include, but are not limited to white spots on smooth surfaces, previous restorations within the past three years from caries, lesions approximating enamel visible on the radiographs, and various cavitation with radiographic penetration into the dentin.White spot lesions, although they can indicate the early stages of carries progression, it also presents an opportunity to arrest the carries. It gives the operator a chance to slow the progression before invasive treatment if recognized in time. Previous restorations can also be an indicator as having a risk for caries or even secondary caries. Radiographs can also be a helpful tool to indicate caries. Lesions approximating enamel may not be easily visible to the eye, but upon radiographic analysis, the lesion can be seen so it can be treated in advance. In addition, the extent of cavitated lesions may also be difficult to see with just the eye. Radiographs can show how far the lesion has penetrated into the dentin. Indicators like these can help with the widespread issue of dental caries and work towards a preventative centered treatment rather than operative. |
| **References:** |
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