

Buffer capacity low

Candida albicans

Note:

Saliva flow rate low (< 0.7ml/min)

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Foreign germs

The two types of agar used in CRT bacteria are highly selective. In rare cases, however, foreign germs may grow on them.



Streptococcus salivarius

These germs are easy to distinguish from mutans streptococci and lactobacilli. Consequently, the test is still evaluable. The



Candida albicans

foreign germs are simply ignored and the classes of relevant bacteria are determined as usual.



Non-mutans streptococci

Yeasts

Growth of yeast colonies on the LB agar represents valuable additional information, which should also be entered on the record sheet. The sensitivity to yeasts is not very high. Therefore, yeast findings on the LB agar indicate an increased density of yeast colonization in the oral cavity. Candida albicans is one of the most frequently occurring yeasts; a mucosal parasite that is present in the oral flora of almost half of the adult population. While low levels of Candida albicans do not cause painful symptoms, an elevated density of colonization causes the unpleasant concomitants of candidosis, such as an itchy or burning reaction of the mucosal areas affected; the typical whitish spots of candidosis are clearly visible. Moreover, C. albicans is considered to have a pathological influence on the formation of caries. Various diseases, reduced saliva flow and a reduced buffer capacity of the saliva promote their spread.

Plaque collecting

Plaque is collected e.g. with a moist brush or toothpick and carefully scraped off on the MS agar. The available space is suitable for four parallel samples. A little water is added to the NaHCO3 tablet. This procedure is recommended for small children, who may not yet master the saliva collecting procedure, as well as for xerostomia patients and patients who have difficulty chewing. Lactobacilli counts in plaque may also be



Plaque collecting

determined by inoculating an LB agar accordingly. This measure is indicated e.g. to monitor the edges around brackets in orthodontic patients or the margins of restorations, as rough areas



Agar inoculation

or a suboptimal marginal seal represent ideal retention niches.

General

The formation of caries is based on a whole complex of causes. Microorganisms play a key thereby. Saliva and its components fulfil an important protective function. Further individual factors of a patient, such as his eating habits and daily oral hygiene, have an effect on the formation of caries. CRT buffer and CRT bacteria aid in determining two important factors in this complex set of interactions – factors which are not visible in the course of a general dental examination.

Schematic on the right: Factors influencing the development of carious defects Individual Microorganisms factors /

Saliva



abonyurates

frequency