

Culture kit for obligate anaerobe at chair side in the dental clinic

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テックス凝集法, 合成基質法にて測定した. また, 末梢血白血球からDNAを抽出し, AT遺伝子のすべてのエクソンとその近傍, およびプロモーター領域をPCR法にて増幅し塩基配列を解析した.

【結果および考察】発端者のAT活性は41.3%, AT抗原は89.2%でTypeII AT欠損症と診断した. 発端者にはAT遺伝子の一方のアレルのエクソン3aに, 塩基番号5342においてTからCへの一塩基置換が認められた. これにより本症例は, Ser116からProのアミノ酸変異

をヘテロ接合体で保有していることが確認された. また, 母と兄も同様のアミノ酸変異をヘテロ接合体で保有していた. Ser116はヘパリン結合領域に存在し, Pro116変異体はヘパリンとの結合能が障害されていると考えられた.

【結論】本症例はSer116Pro変異によるTypeII AT欠損症と診断した.

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【Objective】The anaerobic bacteria those cause oral infections are found at about 70–80% in the infected root canals. Thus, it is important to examine that the root canal is sterile before root canal filling. However, this process has rarely been done for the general clinical treatment because of the difficulties with the device and the method of culturing anaerobic bacteria. In a general way, a specific chamber(anaerobic glove box)is necessary for culturing them, but that is inconvenient for the chair side treatment. Therefore, we have developed a simple culture kit for obligate anaerobe at chair side, which is practical in the general dental clinic.

【Methods】Development of culture kit: For the culture of obligate anaerobic bacteria, the BHI B.M. with vitamin K, glucose and BCG was used. And as the next step, the polyethylene bag was processed. It has a small sack to put subjects and the tap to infuse the mixed gas for culturing the obligate anaerobic bacteria. Inside of it, the small sack has two zipper up and down side, and there are an oxygen absorber, an oxygen detector which change color when oxygen exist, and resin ball to open the zipper easily. To keep out of the air, the mixed gas is injected with a nozzle of a can through the resin cap. Besides, it is possible for our kit to put into the incubator with stood because of its figure. Culture kit test: 5 obligate anaerobic bacterial species, which had been isolated frequently from the infected root canals, were inoculated in the kit sepa-

rately. After incubation for 72h at 37degrees, we examined the pH of the B.M. and the color of the indicator in the kit to find out whether those bacteria could be cultured or not. And we compared the results of culturing by our kit with those by the anaerobic glove box. In addition, we cultured bacteria in the clinical samples taken from the infected root canals by using a paper point.

【Results & Discussions】These 5obligate anaerobes and bacteria in the clinical samples could grow well in all of the cases. The pH of the B.S. decreased and that color changed from green to yellow. These results indicated that our kit is useful for the examination of the existence of the obligate anaerobic bacteria. Our kit is very simple and low-cost. Moreover, it can easily show the existence of the obligate anaerobe visually. Thus, it is extremely practical tool for the chair side treatment. However, there are problems, such as ; 1.It is difficult to show bacteria quantitatively. 2.It is impossible to detect bacteria those do not produce acid so that the color changes depending on pH. So we are processing those disadvantages at the moment.

【Conclusion】It became possible to confirm whether it is sterile or non-sterile by our culture kit easily. Therefore, our kit is expected to make a big progress of the chair side infected root canal treatment at the general dental clinic.

当医院における10年間のインプラント診療の実態

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【目的】近年, インプラント治療は欠損補綴の有用な手段として開業医にも広く普及してきている. 当院でも1995年より導入し10年が経過した. これら10年の経験を今後の診療に生かすため, その診療実態をまとめ, 検討を行ったので報告する.

【方法】1995年10月から2005年12月まで, 当院にてインプラントを埋入した96名236本のインプラントについて検討を行った.

【結果および考察】埋入手術は160回で1回の平均本数は1.48本,

一人当たりの手術回数は1.67回であった. 男女別では男30人, 女66人. 初回埋入時平均年齢は50.4歳(男51.8歳, 女49.8歳)で, 高齢になるにしたがい男の比率が大きくなる傾向がみられた. これは, 女性や若年者では審美的な要求が強く, 男性や高齢者では咀嚼機能改善への要求が高まるためと思われた. 部位別では上顎121本, 下顎115本. 歯種別では下顎6番が50本と最も多く, ついで上顎6番(33本), 上顎4番および下顎5番(各28本)の順であった. また,