CHAPTER I

INTRODUCTION

Candidiasis is, by far, the most common mycotic infection of the human oral cavity. The usually manifested clinical term for oral candidiasis at all ages from the newborn to the elderly is thrush. Other forms that affect the mouth include acute atrophic candidiasis associated with oral antibiotic therapy, chronic atrophic candidiasis attributed to the wearing of upper dentures, candidal cheilitis ascribable to perleche or decreased vertical dimension in the lower third of the face, chronic mucocutaneous candidiasis emanating from cell-mediated immunity defect, and candidal leukoplakia or chronic hyperplastic candidiasis. Extensive use of antibiotics and immunosuppressive drugs have greatly increased the number of Candida-induced oral infections. Patients debilitated by irradiation, cancer chemotherapy, organ transplants, diabetes mellitus, and defects in cell-mediated immunity are particularly vulnerable. Fortunately, the vast majority of cases of oral candidiasis are not life-threatening and readily respond to appropriately administered antimycotic agents. It must always be remembered, however, that the organism has the capacity to produce fulminating fatal infection,

especially in the debilitated patient and patients who receive the immunosuppressive drugs, by hematogenous dissemination from seemingly inocuous oral infections that serve as a portal of entry to the systemic circulation. Consequently, all oral candidal infections in compromised patients must be treated vigorously and effectively.

All of the oral candidiasis, chronic atrophic candidiasis (denture sore mouth and denture stomatitis are other terms used for this condition) could be seen commonly at all ages, especially in geriatric denture wearers. The term used to describe certain pathologic changes found in the oral mucosa of denture-bearing tissues. These changes are characterized by a chronic bright erythema and edema of that part of the palatal mucosa that comes into contact with the prosthetic appliance and is usually symptomless. Some patients will complain of swelling, sensitivity, and pain in the affected areas. Denture stomatitis is found under temporary plate, partial and complete dentures in both jaws, but more frequently in the maxilla. *Candida* species can be cultured from both the involved mucosa and inner lining of the denture. In this study the condition will be called denture stomatitis, referring to the lesions seen in the palatal mucosa.

As a dentist, the author found that a number of denture-wearing patients suffered from denture stomatitis. The aim of this investigation is firstly to find out the prevalence of *Candida* species from healthy oral mucosa in a control Thai dental student. Secondly, it is to demonstrate the distribution of Candida from the various sites of the oral mucosa and to identify these *Candida* species. Thirdly, it is to determine the correlation of salivary culture and imprint culture techniques. And fourthly, it is to compare the quantity of candidal organisms and *Candida* species of the control denture wearer group to that of the denture stomatitis group.