INTRODUCTION

Since Landsteiner (1901) discovered that human blood groups existed, a vast body of serological, genetic and more recently biochemical data on red cell blood group antigens has been accumulated.

About 200 red cell antigens have been described, most of which have been assigned to well defined blood group systems. Most of these antigens were detected by antibodies stimulated by transfusion or pregnancy.

Different blood groups are discovered time to time. Here some important blood groups are listed ABO by Landsteiner (1901), MNSs and P system by Landsteiner and Levine (1927), Rh system by Levine and Stelson (1939) Lewis system by Mourant (1946), Duffy (1950), Kidd (1951), Vel (1952), Wright (1953), Diego (1955), Cartlорight (1956), I (1956), Xg (1962), Sc Larine (1962) and others.

Antigens identical to the ABO (H) blood group antigen are present on the leucocytes and platelets too. These antigens are widely distributed in human tissues (Szulman, 1960) and as water soluble mucopolysaccharides are present in saliva, and various secretions. Large quantities of tissue isoantigens have been demonstrated in mucous secreting cystadenomas of ovary (Davidsohn et al 1960)
and also in gastric mucosa and pancreas. The isoantigens in lesser amounts are present in lungs and uterine cervix and totally absent in connective tissues.

In a constant indeavour to find now, simple and effective method of assessing cellular differentiation ABO (H) isoantigen are one of the surface antigens, normally present on the epithelial cells surfaces. Their loss is associated with malignant transformation and this loss of antigen is parallel to the degree of anaplasia (Varelzidis et al, 1980).

Demonstration of antigens is not feasible by agglutination test, but may be accompanied by specific absorption by adding antibody or by fluorescent antibody applied to the tissue section (Coons and Kaplan, 1950) or by mixed cell agglutination reaction (MCAR) (Topley and Wilson, 1955) or an immunological specific red cell adherence test (SRCA). It is a modification of coomb's mixed cell agglutination reaction (Coomb's et al, 1956) modification is given by (Kovarik et al, 1980). It is specific and sensitive test for detection of ABO (H) antigen in paraffin and frozen section. It is based on sandwich principle (Tonder et al, 1966).
Isoantigen ABO (H) in various malignant lesions have been studied by different authors e.g. large quantities of ABO (H) have been demonstrated in gastric mucosa, pancreas, lungs, uterine cervix by Davidsohn et al (1960), bronchogenic carcinoma (Davidsohn et al, 1969), Fallopian et al (1973), oral cancers (Lie et al 1974), Laryngeal carcinoma (Liv et al 1977), Prostate (Gupta et al 1978), Urinary bladder (Alroyet et al 1978), Nasopharyngeal carcinoma (Gupta et al 1983) and breast carcinoma (Vowden et al, 1986).

Isoantigen ABO (H) in various malignant and non malignant lesion of oral cavity have been studied by different authors. The 'A' antigen on the buccal epithelial cells of man (Coomb's et al 1961), reactivity of blood group substances of neoplastic oral epithelium (Richard et al 1968), Studies in oral leukoplakia (Pindborg et al 1968), Oral epithelium exhibiting atypia (Dabelsteen et al 1971), Loss of epithelial blood groups substance A in oral carcinoma (Pindborg et al 1973), loss of epithelial blood group antigen A during wound healing in oral mucous membrane (Dabelsteen et al 1974) and loss of epithelial blood group antigens A & B in oral premalignant lesions (Dabelsteen et al 1975).
The importance of early diagnosis of oral malignancy as regards prognosis and treatment cannot be over emphasised. Therefore oral lesions has especially been selected for study, with the idea that behaviour of ABO (H) isoantigen may prove to be of considerable diagnostic as well as prognostic value and possibly a guide to therapy.

The present study is being undertaken to assess the ABO (H) isoantigen in different benign and malignant lesions of oral cavity by specific red cell adherence technique.