INTRODUCTION

Head and neck cancer is one of the most common malignancies in the world,. Each year 40% of cancers in males are grouped under head had neck cancers. *(Bhatavdekar 1987).*

During the course of tumour development, quantitative changes occur in the level of a variety of substances in serum. Such substances are collectively referred to as tumour markers or biochemical serum markers, and these can be classified as belonging to one of several major groups. Examples include oncofetal proteins (Carcinoembryonic antigen " CEA" , alpha- fetopretein "AFP") hormones (adrenocorticotropin, chorionic gonadotropin, calcitonin) enzymes (Prostatic acid phosphatase), or serum proteins (beta-2 microglobulin, ferritin), *(Herberman 1983).*

Many of these markers are elevated in diseases other than cancer, and are therefore considered non specific, but have been shown to be of value in the management of cancer patients. *(Wolf 1979).*

To date, no single tumour marker has fulfilled the requirements of an ideal marker with high specificity and sensitivity for head and neck malignancies. So the determination of human tumour markers is usually considered

of little use for early cancer detection and screening. *(Silverman 1976).*

It was stressed that, even if a marker is not discriminatory for early diagnosis in a particular patient, determination of marker values may be useful for identifying and menitoring populations known to be at risk. *(Herberman 1983).*

In a patient treated for cancer, the determination of either specific or non-specific markers, such as HGG, AFP, or CEA, enables assessment of the tumour burden, and possibly of recurrence, with a lead time that may be kup to several months ahead of the clinical findings. Values for nonspecific tumour markers in the " normal" individual, are based on analysis of mean values obtained from a large sample of "normal" population, with a confidence limit of 95% corresponding to 2SD arround the mean. *(Pluygers et al 1986).*

Some markers are elevated in special types of tumours, CEA was recognised as a Medullary thyroid carcinoma (MTC) tumour marker more recently (Clamettess et al 1977).

Ferritin is the major iron-binding and storage protein of human tissues and is present in serum in nanogram

quantities. This protein has been shown to be a good tumour marker for several different systems *(Dresdale 1983)*.

High consentrations of ferritin had been demonstrated in extracts of various tumours *(Giller et al 1978)*. It was demonstrated in sera of patients with lung cancer, *(Maxim et al 1980)* and in head and neck cancer patients, *(Maxim et al 1980)*

It was concluded that ferritin levels in head and neck cancer patients provided a useful marker of patient progrosis. *(Maxim and Veltri 1986)*.

This study attempted to determine whether serum CEA and serum ferriitin levels could be used as tumour markers to monitor therapy in head and neck cancer patients.