-Tumour markers in head and neck tumours (oto rhino-laryngeal and pharyngeal tumours)

Ebrahim Samy Ebrahim Nada

Profound biochemical changes are associated with the activities of quite small tumours which otherwise remain undctected,until they are large enough to produce local or systemic manifestutions. These activities result in a wide variety of biochemical products or TUMOUR MARKERS that can be detected in body fluids.In this study we estimate the level of ferritin(Fer) and carcinoembryenic antigen (CEA) as tumour markers in theserum of :20 Cases : of malignant lesions of head and neck before treatment, during the course of treatment, and after the end of treatment whether; chemotherapy, radiotherapy or Surgery , by at least 3 months.20 Cases: of benign lesions of head and neck, before treatment, under treatment and at the end of treatment whether; operative chemotherapy and radiotherapy, by at least 3 months.These patients were clinically free at the end of treatment.20 individuals : as control cases.All samples were analysed by immunoenzymometr c assaymethod.In control group the highest value of CEA was 5.77 ng/ml and that of ferritin was 52.83 ng /ml. (Table 2)These values were considered to be the upper normal •serum levels of these tumour markers in this study .By comparing smokers and nonsmokers in control group we found that the mean serum levels of ECA of smokers was 4.75 ng/ml and that of nonsnokers was 2.75 ng/ml. It was highly significanat. (Table 4)The mean serum level of ferritin for smokers was 37.14 ng/ml and that of nonsmokers was 44.59 ng/ml It was signifcantiy high (Table 5)The serum levels of tumour markers in patients with BENIGN tumours BEFORE treatment were significantly higher than control.- 95 % of patients had high SEA serum levels and- 100% of patients had high fer serum levels.(Table 15)The serum levels of tumour markers in patients with BENIGN tumours UNDER treatment were significantly higher than control- 85% of patients had high CEA serum levels and- 90% of patients had high Fer serum levels.(Table 16) The serum levels of tumour markers in patients withBENIGN tumours AFTER treatment were decreased to normallevels and only :- 15 % of patients had high CEA serum levels and- 35% of patients had high Fer serum levels (Table 17)Serum Fer levels were not significantly higher in smokers than nonsmokers whether before treatment, under treatment or after treatment .(Table 12, 13 , 14)Serum CEA levels were significantly higher in smokers than nonsmokers during and after treatment while before treatment CEA serum levels were not significautly higher in smokers than nonsmokers. (Table 9, 10, 11)The serum levels of tumour markers in patients with MALIGNANT tumours BEFORE treatment were significantly higher than contral- 100% of patients had high

CEA serum levels and- 100% of patients had high Fer Serum levels(Table 29)The serum levels of tumour markers in patientswith MALIGNANT tumours UNDER treatment were significantly higher than control-100% of patients had high CEA serum levels, and-100% of patients had high Fer serum levels(Table 30)The serum levels in patients with MALIGNANT tumours AFTER treatments were also significantly higher than control-65% of patients had high CEA serum levels, and-95% of patients had high Fer serum levels.(Table 31) In BENIGN group BEFORE treatment the highest value of serum CEA level was 13.67 ng/ml and that of Fer was 170.1 ng/mlThe serum levels of tumour markers in patients with MALIGNANT tumours BEFORE treatment were significantly higher than benign;- 95% of patients had high CEA serum levels and-95% of patients had high fer serum levels.(Table 32) •In BENIGN group UNDER treatment the highest value of CEA serum level was 8.1 ng/ml and that of Fer was 109.3 ng/ml.The serum levels of tumour markers in patients with MALIGNANT tumours UNDER treatment were significantly higherthan benign:-95% of patients had high CEA serum levels. and-95% of patients had high Fer serum levels.(Table 33)In BENIGN group AFTER treatment the highest value of CEA was 5.98 ng/ml and that of Fer was 68.6 ng/mlThe serum levels of tumour markers in patients with MALIGNANT tumours AFTER treatment were significanity higher than bengin for Fer and less significant for CEA.-50% of patients had high CEA serum levels, and-95% of patients had high fer serum level. (Table 34)MALIGNANT lesions were divided into smokers andnonsmokers. Serum CEA and Fer levels were significantlyhigher in smokers than nonsmokers BEFORE and UNDERtreatment while AFTER treatment they were insignificant.(Table 25, 26 , 27)All tumour markers which were significantly higher than controls showed a significant decrease after treatment This decrease correlated with objective regression of the disease and this shows the importance of tumour markers in monitoring cancerous and precancerous conditions.The sensitivity and specificity of tumour marker tests for neoplastic disease are likely to improve, and will become more widely available.