

SUMMARY

Malignant tonsillar tumours account for about 3% of malignant tumours of the whole body (Barrs, 1979). Over 70% of tonsillar malignancies are squamous cell carcinoma, of varying degree of histo-differentiation (Batzakis, 1979). Over 15% of tonsillar malignancies are malignant tonsillar lymphoma (Kabadia, 1985). The so-called lympho-epithelioma accounts for 5% of malignant tonsillar tumours (Chen, 1975). This term was used to define a tumour with two components, epithelial and lymphoid elements present together. The origin of the tumour was obscured, whether it arose from one or the other (Regaud, 1921 and Schmincke, 1921).

Tonsillar squamous cell carcinoma of undifferentiated nature and infiltrated with lymphocytes is difficult or some times impossible to distinguish from malignant lymphoma with the conventional methods even with skilled pathologist (Batzakis, 1979 and Micheals, 1977).

using the electron microscopy, the epithelial origin of the tumour is confirmed (Svoboda, 1967). We choose the immunoperoxidase technique as it is simple, accurate and can be done in ordinary laboratories using simple light microscopy. Using the anticytokeratin (AE₁, AE₃) we can identified the presence of epithelial cells, as the cytokeratins are intermediate size filament of water insoluble proteins, which can be produced by epithelial cell only. The AE₁ and AE₃, constitute a pool of anticytokeratin which can be used as a common antibodies for detection of all types of epithelial cells. To detect lymphocytes, T and B cell we used T₂₀₀ antibodies to detect the glycoproteins of high molecular weight, which are surface antigens.

In our study, 26 patients were chosen from the out patients of Cancer Institute, Cairo University, Benha University Hospital, and Zagazig University Hospital, and who were proved to suffer from undifferentiated tonsillar squamous cell carcinoma.

Using immunoperoxidase technique with the two pri-

mary antibodies, anticytokeratin (AE₁ and AE₃) and T₂₀₀ (common leucocyte antigen), the first to identify epithelial cells, while the second to detect of lymphocytes.

Using ABC method (Avidin Biotin conjugate method) on formalin fixed paraffin embedded sections, the problem of background staining was solved.

The biopsies were taken using local anaesthesia, then Heamatoxylin and Eosin was done then the immunologic study was done.

From our studies 80% of querry undifferential squamous cell carcinoma, were proved to be undifferentiated squamous cell carcinoma, while 20% were proved to be malignant lymphoma. Male were predominant, the ratio of males to females 5.5:1%.

There was no patients below 30 years, the average age was 60.5 years, with two peaks 30% between 50-60 years and 40% between 60-70 years.

The heavy smoking i.e. smoking two box of cigarettes for 15 years or more, was the special habit

for 77% of the patients mainly the male ones, while the alcohol drinking was 23% of the cases.

The presenting symptoms in our study were lump in the neck 73%, sore throat in 7.9%, foreign body sensation in 3.8%, dysphagia in 7.9%, haemoptysis in 3.8% and referred ear ache in 3.8%.

The presenting signs in our study were exophytic tonsillar mass 80% of cases and 20% in ulcerative type. The exophytic type was classified into T₁ 4.3%, T₂ 20.1%, T₃ 55.3% and T₄ 20.3% while ulcerative type was divided into T₁ 40%, T₂ 60%.

As for lymph node involvement 80% of cases have clinically positive lymph nodes, mainly in jugulo-digastric lymph nodes. The lymph node involvement was classified as N₁ 28%, N₂ 30%, N₃ 42%.

On applying anticytokeratin (AE₁ and AE₃) on tonsillar malignant tumours, the epithelial origin tumours only gives positive results i.e. undifferentiated tonsillar squamous cell carcinoma. Also, the more undifferentiated is the tumour the less positively staining

results will be obtained, the reaction was focal and cytoplasmic as the cytokeratins are present in focal areas in the cytoplasm and not membranous.

On applying the T₂₀₀ (common leucocyte antigen), we get positive results, membranous in site due to the presence of T₂₀₀ antigens, glycoproteins of high molecular weight present on the surface of the lymphocytes. There were no relation between grading of lymphoma and the reaction of staining or the distribution of staining.

The grading of the epithelial tonsillar malignant tumours can be correlated with the intensity of the Biologic reaction and its pattern. The more undifferentiated the tumour, the less will be the intensity of the Biologic reaction and more focal is the pattern of reaction.

The precise diagnosis of undifferentiated tonsillar squamous cell carcinoma from malignant tonsillar lymphoma helps the surgeons greatly in accurate treatment whether surgery and/or radiotherapy in cases of

carcinoma and chemotherapy and radiotherapy in cases of lymphomas. Also, the exact diagnosis gives the surgeons an idea about the expected prognosis and five years survival rates.