MANAGEMENT OF PAROTID GLAND TUMORS

ESSAY

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M.Sc Degree in
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By

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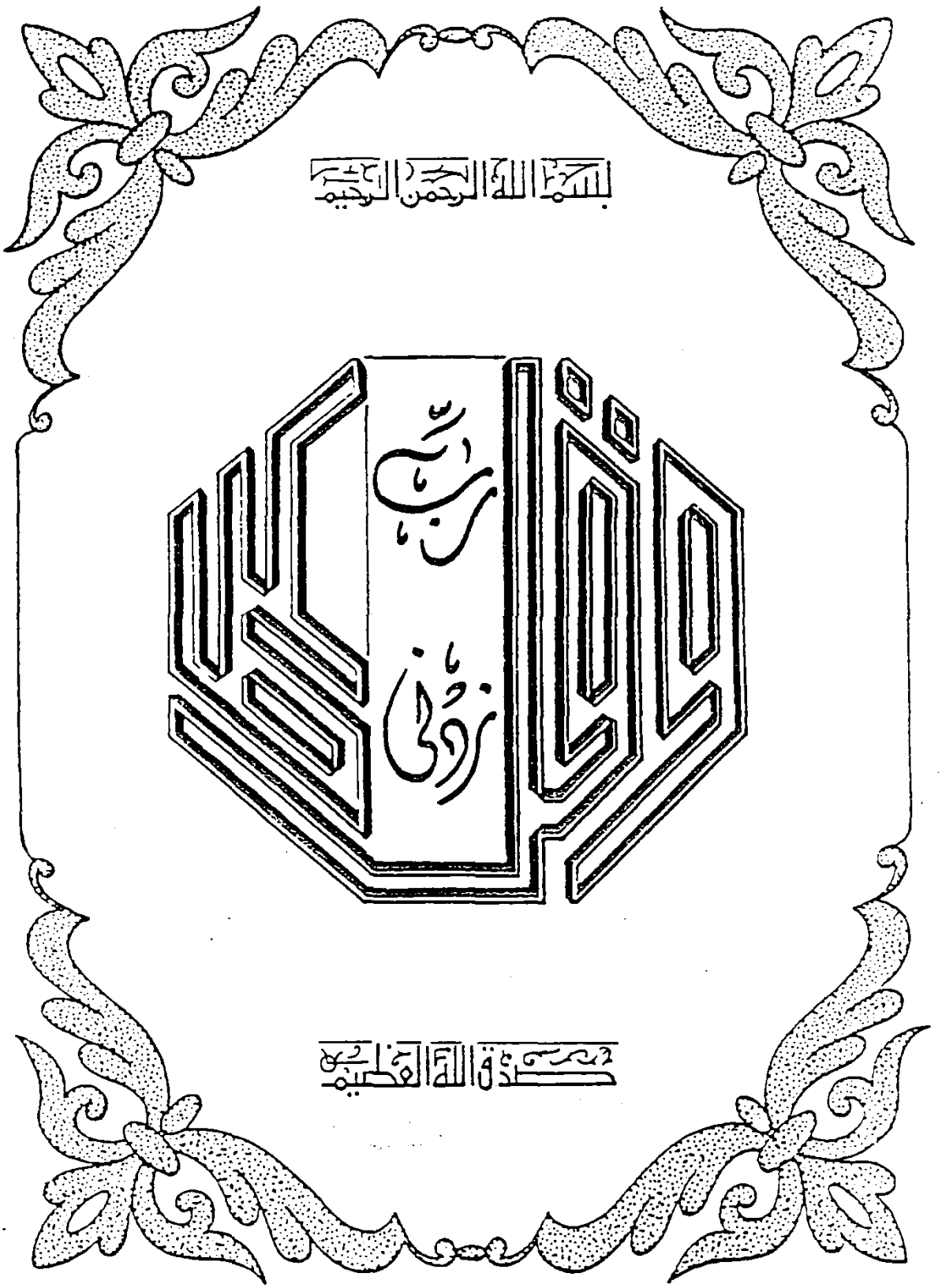

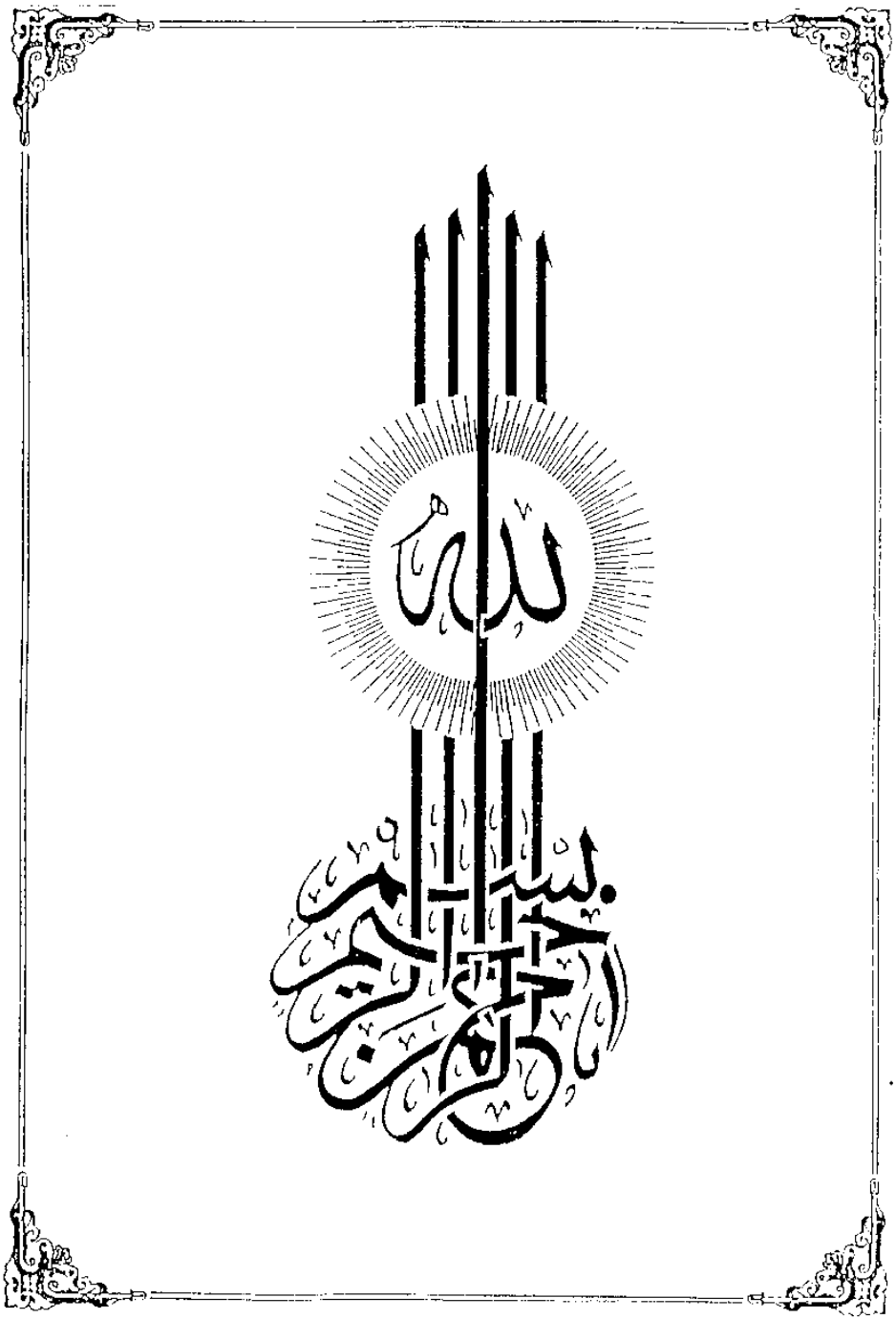

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List of abbreviations

ACC	Acinic cell carcinoma
AIDS	Acquired immune deficiency syndrome
AJCC	American Joint Comittee on Cancer
BLL	Benign lymphoepithelial lesion
BMT	Benign mixed tumor
CA	Cancer associated antigen
CAP	Cyclophosphamide, adriamycin and cisplatin
CDDP	Cis-diamminedichloro-platinum
CEA	Carcino-embryonic antigen
cGy	Centi gray.
Ch. Th.	Chemotherapy
CHART	Continuous accelerated hyperfractionated radiation therapy
CI	Continous infusion
CMF	Cyclophosphamide, methotrexate and 5-Fluorouracil
C n	Cranial nerve
Co^{60}	Cobalt-60 teletherapy
CR	Complete response
CT	Computerized tomography
CVF	Cyclophosphamide, vincristine and 5-fluorouracil
Gy	Gray
CyVADIC	Cyclophosphamide, vincristine, adriamycin and dacarbazine

DFS	Disease free survival
DNA	Deoxy ribonucleic acid
FCAP	5-Fluorouracil, cyclophosphamide, adriamycin and cisplatin
FDG	2(fluorine-18)-fluoro-2- deoxy-p-glucose
FNA	Fine needle aspiration
5-FU	5-Fluorouracil
H & E	Hematoxilen and eosine.
HIV	Human Immune deficiency virus
I^{125}	Iodine-125
Ir^{192}	Iridium-192
IA	Intraarterial
IgA	Immunoglobulin A
IORT	Intraoperative radiation therapy
IV	Intravenous
LDR	Low dose rate
Lt.	Left
MALT	Mucosa associated lymphoid tissues
MAP	Mitomycin, adriamycin and platinol
mE/m^2	Milli equivalent per liter
Mev	Million electron volts.
mg/m^2	Milligram per meter square
MLEL	Malignant lymphoepithelia lesion
MMT	Malignant mixed tumor
MRI	Magnetic resonant imaging
ncGy	Neutron centigray

NCI	National Cancer Institute
NHL	Non Hodgin's lymphoma
NEMROCK	Kasr El-Eini Center of Radiation Oncology and Nuclear Medicine
NOS	Adenocarcinoma not otherwise specifid
OER	Oxygen enhancement ratio
PAF	Cisplatin, adriamycin and 5-fluorouracil
PBM	Cisplatin, bleomycin and methotrexate
PET	Positron emission tomography
PHI	Phosphohexose isomerase
Po od	Per orum once daily
PORT	Post operative radiotherapy
PR	Partial response
Ra^{226}	Radium-226
RR	Relative risk
Rt	Right
RT	Radiation therapy
SCC	Squamous cell carcinoma
SCC-Ag	Squamous cell carcinoma antigen
SDC	Salivary duct carcinoma
SDD	Source surface distance
SIPI	Serum immunoglobulin prognostic index
TAG	Tumor associated glycoprotein
Tc99-m	Technetium pertechnetate
TMJ	Tempromandibular joint

TNM	**Tumor, node metastases**
U/S	**Ultrasonography**
VAC	**Vincristine, adriamycin and cyclophosphamide.**

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INTRODUCTION AND AIM OF THE WORK

Introduction

The parotid gland is the largest salivary gland and the most frequently involved with benign and malignant disease. Parotid gland neoplasms are uncommon and accounts for less than 2% of all human tumors (George et al., 1991).

No sexual predilection can consistently identified except for cases of Warthin's tumors which develops about five times more frequently in men (Haskell, 1990).

Histopathologically, parotid tumors can be classified into benign 75% and malignant 25%. Benign tumors of parotid gland can be classified into:

Benign mixed tumors

Warthin's tumors

Miscellaneous benign tumors (Saunders et al., 1986).

As a general rule, benign tumors occur in younger patients whereas those patients afflicted with malignant tumors are older for instance, h emangiomas accounts for about 50% of parotid tumors in infants and children, compared to 2% in adults (George et al., 1991).

Malignant parotid tumors can be classified pathologically into : Mucoepidermoid carcinoma which accounts for 29% of all malignant

parotid tumors, adenocarcinoma, adenoid cystic carcinoma, malignant mixed tumors, undifferentiated carcinoma, acinic cell carcinoma, malignant lymphoma, melanoma and others (Skarin, 1992).

Mucoepidermoid carcinoma can be categorized into low grade (74%) and high grade (26%), and lesions so classified provide relatively good and bad prognostic groups with respect to local recurrence and metastatic ability (Batsakis, 1990). It may develop in patients of any age but the peak incidence is the 5th decade (Haskell, 1990).

The incidence and pattern of local extension, regional nodal metastases and distant metastases of malignant parotid tumors, vary with histological type. Most malignant parotid tumors metastasize initially to local lymph nodes drainge and 20-30% of patients have clinically positive regional lymph nodes at presentation (Rafla, 1977).

Surgery remains the primary therapy for carcinoma of the parotid gland. Surgical technique depends on location and extent of primary disease and regional adenopathy.(Kaplan and Johns, 1993).

Patients with disease free surgical margins, a favourable histology, negative nodes have usually not been given adjuvant radiation therapy post operatively, particularly in the initial treatment program. (Spiro and Spiro, 1989)

Patients with recurrent lesions, residual disease left at surgery, and high grade lesions have increasingly been given post operative radiation therapy to decrease recurrence (Tapley, 1977 and Mutsuba et al., 1985).

There is an 87% local control rate for parotid tumors treated with postoperative radiation therapy (McNaney et al., 1983).

Those who refuse surgery or demonstrate obviosly unresectable local lesions or distant spread at diagnosis are generally refered for radiation therapy alone, with either palliative or occasionally curative intent (Simpson et al., 1986).

The relative variety of these neoplasms and their localized nature have oviated most opportunities for trials in chemotherapy. Treatment regimens have been used either as neoadjuvant, adjuvant or palliative. Dreyfuss and associates (1987) reported a 46% response rate in 13 patients with adenoid cystic carcinoma to a combination of cyclophosphamide, doxorubicin and cisplatin.

Aim of the work

The aim of this review is to revise the management of parotid gland tumors including; incidence, anatomy, etiology, pathology, clinical findings, diagnosis and different treatment modalities.

REVIEW OF LITERATURE