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CURRENT MANAGEMENT OF
CARCINOMA OF THE BREAST

AN ESSAY
SUBMITTED IN PARTIAL FULFILMENT FOR
THE MASTER DEGREE IN GENERAL SURGERY

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Carcinoma of the breast is one of the main diseases in surgery of which the best treatment is still a matter of controversy .

The aim of this study is to present the various current trends in treating this disease .

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ESSAY STATEMENTS AND OUTLINES

ANATOMY OF THE BREAST

- ANATOMICAL SITE OF THE BASE.
- BLOOD SUPPLY
- LYMPHATIC DRAINAGE

PHYSIOLOGY OF THE BREAST

- ROLE OF ESTROGENS AND PROGESTERONE.
- LACTATION
- HORMONE RECEPTORS AND CANCER.

PATHOLOGY

MALIGNANT EPITHELIAL TUMOURS.

1- NON - INVASIVE :

A) DUCTAL CARCINOMA IN-SITU.

B) LOBULAR CARCINOMA IN-SITU.

I- PAPILLARY PATTERN.

II- CRIBRIFORM PATTERN.

III- COMEDO-CARCINOMATOUS PATTERN.

IV- CLINGING CARCINOMA.

V- INTRACYSTIC CARCINOMA.

2- INVASIVE :-

A) INVASIVE DUCTAL CARCINOMA.

B) INVASIVE DUCTAL CARCINOMA WITH A PREDOMINANT
INTRADUCTAL COMPONENT.

C) INVASIVE LOBULAR CARCINOMA.

D) MUCINOUS CARCINOMA.

E) MEDULLARY CARCINOMA.

F) PAPILLARY CARCINOMA.

G) TUBULAR CARCINOMA.

H) ADENOCYSTIC CARCINOMA.

I) SECRETORY CARCINOMA.

J) APOCRINE CARCINOMA.

K) CARCINOMA WITH METAPLASIA.

i- SQUAMOUS TYPE

ii- SPINDLE CELL TYPE.

iii- CARTILAGENOUS AND OSSEOUS TYPE.

iv- MIXED TYPE.

L) OTHER TYPES.

3- PAGET'S DISEASE OF THE NIPPLE.

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VARIOUS STAGINGS OF BREAST CANCER

- MANCHESTER CLASSIFICATION.
- UICC-AJC CLASSIFICATION.
- COLOMBIA CLINICAL CLASSIFICATION.
- UICC-AJC POST-SURGICAL TREATMENT PATHOLOGICAL CLASSIFICATION.

DIAGNOSIS

- HISTORY.
- PHYSICAL EXAMINATION.
- INVESTIGATIONS.
 - 1- MAMMOGRAPHY
 - 2- THERMOGRAPHY
 - 3- ECHOGRAPHY
 - 4- CHEST X-RAY
 - 5- X-RAY SURVEY OF THE SKELETON
 - 6- SKELETAL SCAN, HEPATIC SCAN, BRAIN SCAN, AND
C.T. SCANS
 - 7- LYMPH NODE SCINTIPHOTOGRAPHY
 - 8- BIOLOGICAL MARKERS
 - 9- SELF EXAMINATION
 - 10- BIOPSY
- SCREENING

SURGICAL TREATMENT

- RADICAL MASTECTOMY
- EXTENDED RADICAL MASTECTOMY
- MODIFIED RADICAL MASTECTOMY
- TOTAL MASTECTOMY
- PARTIAL MASTECTOMY
- BREAST RECONSTRUCTIONS

RADIOTHERAPEUTIC TREATMENT

- POST-OPERATIVE RADIATION
- PRE-OPERATIVE RADIATION
- PRIMARY RADIATION THERAPY
- HAZARDS OF RADIOTHERAPY

ADJUVANT THERAPY

CHEMOTHERAPY

- SINGLE AGENT CHEMOTHERAPY
- EFFECT OF THE DOSE.
- COMBINATION CHEMOTHERAPY
- DURATION OF TREATMENT
- TIMING OF DRUG ADMINISTRATION
- CHEMOTHERAPY IN EARLY STAGES

HORMONAL THERAPY

- OOPHOECTOMY
- HYPOPHYSECTOMY
- ADRENALECTOMY
- ADDITIVE HORMONAL THERAPY
- ANTI-ESTROGENS
- SIGNIFICANCE OF ER. AND PR. ASSAYS

PROGNOSIS

CLINICAL FACTORS :

- 1- PRESENCE OR ABSENCE OF METASTASES.
- 2- AGE
- 3- PREGNANCY
- 4- DELAY BEFORE TREATMENT.
- 5- DELAY BETWEEN DIAGNOSIS AND RECURRENCE.
- 6- DEGREE OF EVOLUTION OF THE TUMOUR.
- 7- SIZE OF THE TUMOUR
- 8- SKIN INVASION.
- 9- INVASION OF THE DEEPER STRUCTURES.
- 10- REGIONAL LYMPHADENOPATHY.
- 11- BILATERAL BREAST CANCER
- 12- MALE BREAST CANCER

PATHOLOGICAL FACTORS :

- 1- HISTOLOGICAL TYPE.
- 2- HISTOLOGICAL GRADE.
- 3- CERTAIN STROMAL FEATURES.
- 4- SITE OF THE TUMOUR.
- 5- CAPSULAR INVASION.
- 6- SINUS HISTIOCYTOSIS OF LYMPH NODES.
- 7- MACROPHAGE CONTENT OF THE TUMOUR.
- 8- POLYAMINES LEVEL.
- 9- CLONOGENICITY.
- 10- TIME BETWEEN PRESENTATION AND BONE METASTASES.
- 11- ESTROGEN RECEPTOR STATUS.
- 12- EPIDERMAL GROWTH FACTOR RECEPTORS.