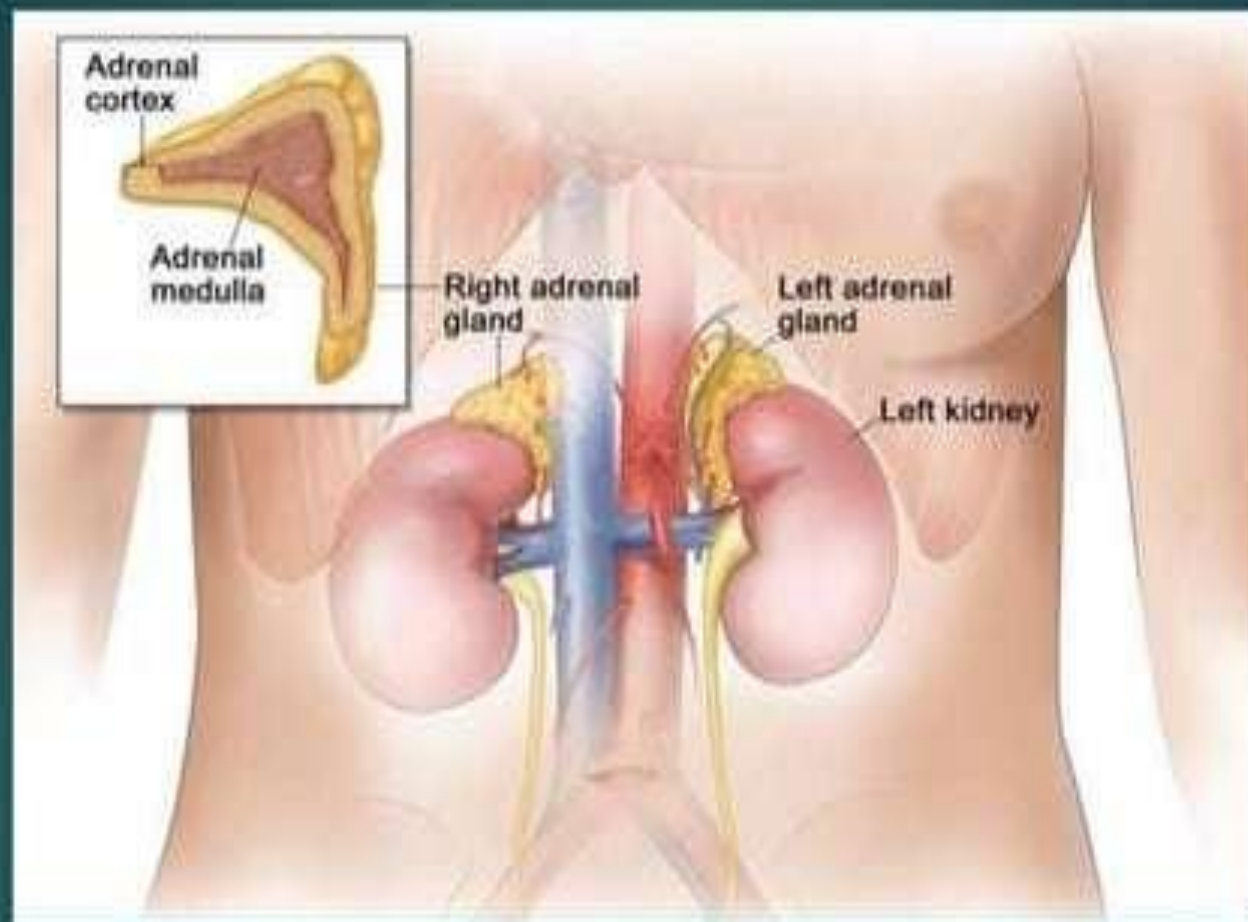


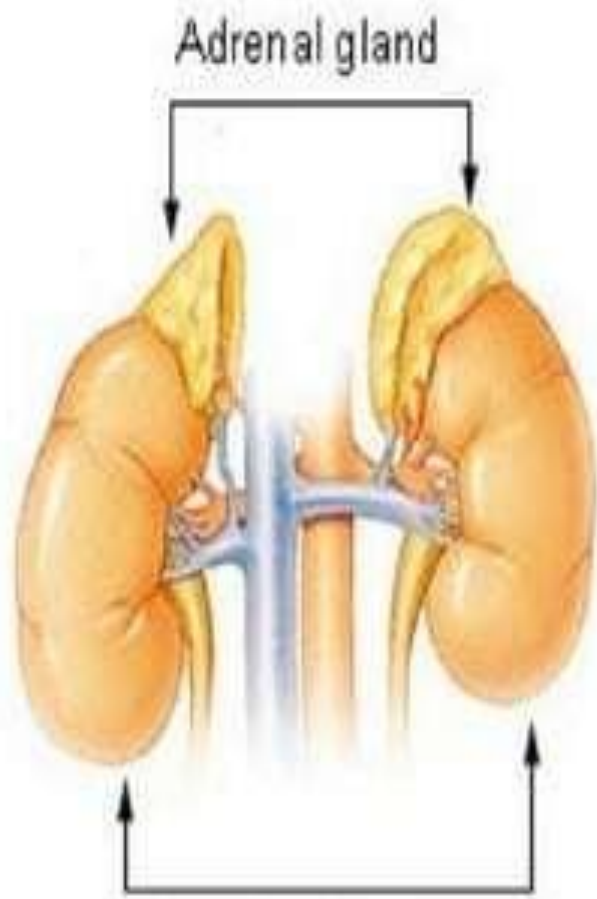
Adrenal TUMOR



PRESENTED BY:

MR. ABHAY RAJPOOT

ADRENAL GLAND

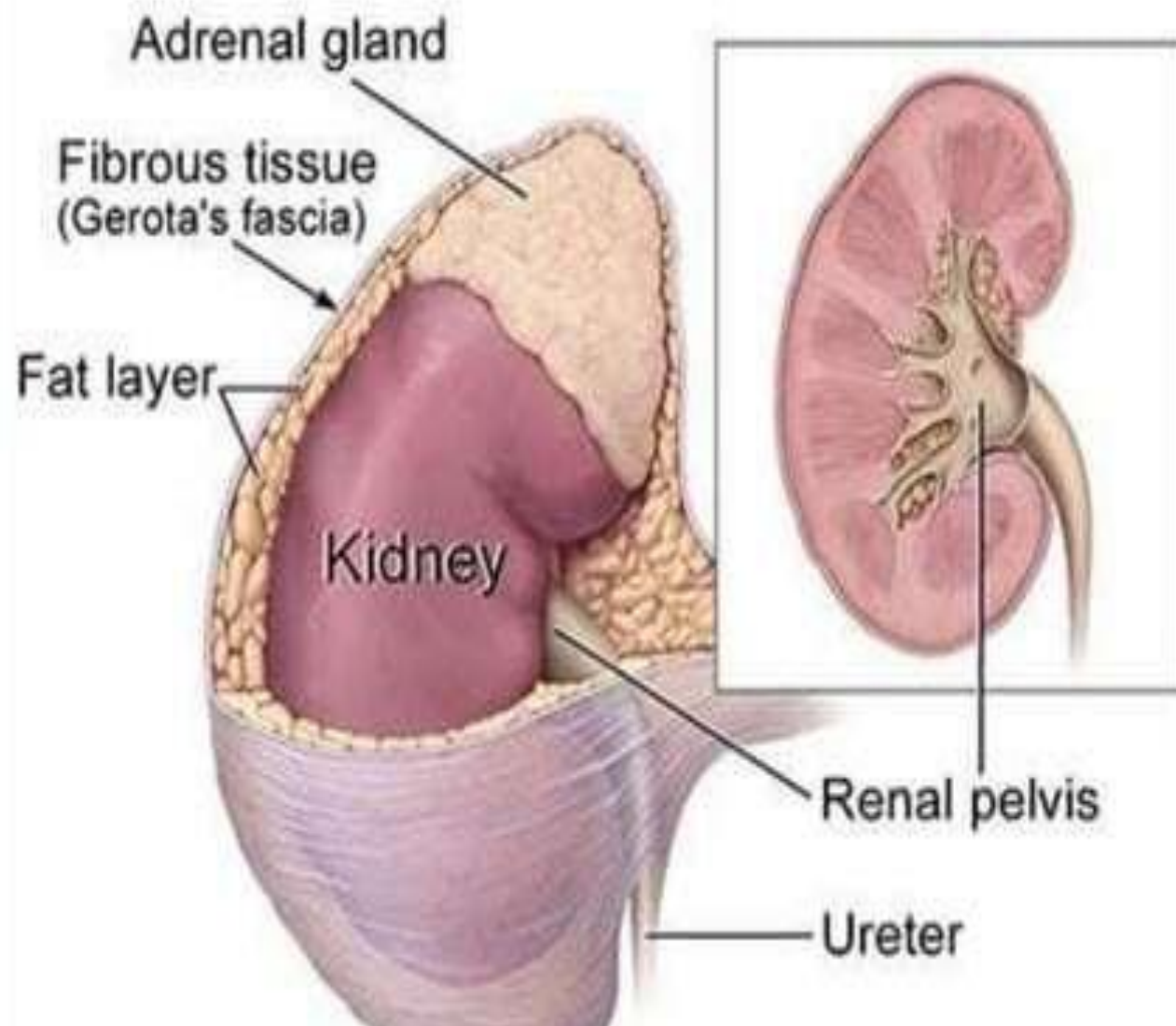


The adrenal glands are paired endocrine glands situated over the medial aspect of the upper poles of each kidney. They secrete steroid and catecholamine hormones directly into the blood.

INTRODUCTION

A tumor begins when healthy cells change and grow out of control, forming a mass. A tumor can be cancerous or benign. A cancerous tumor is malignant, meaning it can grow and spread to other parts of the body. A benign tumor means the tumor can grow but will not spread.

An adrenal gland tumor can sometimes produce too much of a hormone. When it does, the tumor is called a "functioning tumor." An adrenal gland tumor that does not produce hormones is called a "nonfunctioning tumor."



DEFINITION

Adrenal cancer is a condition that occurs when abnormal cells form in or travel to the adrenal glands. Adrenal cancer usually occurs in the outermost layer of the glands, or the adrenal cortex. It generally appears as a tumor.

It is catecholamine – secreting neoplasm associated with hypertension of Chromaffin cells of Adrenal Medulla.

Types of adrenal gland tumors

Benign adenomas

- ▶ Benign adenomas are relatively small, usually less than 2 inches in diameter. Most people with this type of tumor have no symptoms. These tumors usually occur on only one adrenal gland, but they can appear on both glands in rare instances.

Adrenal cortical carcinomas

- ▶ Adrenal cortical carcinomas are usually much larger than benign adenomas. If a tumor is more than 2 inches in diameter, it's more likely to be cancerous. Sometimes, they can grow large enough to press on your organs, leading to more symptoms. They can also sometimes produce hormones that cause changes in the body.

CAUSES

- ▶ Medullary thyroid carcinoma
- ▶ Parathyroid Hyperplasia
- ▶ Emotional and physical stress.
- ▶ General factor
- ▶ Increased or Decreased secretion of Hormone.

SIGN AND SYMPTOMS

- Hypertension
- Hypermetabolism
- Hyperglycaemia
- Head ache
- Visual Disturbances
- Nervousness
- Increased blood glucose level
- Abdominal pain
- Polyuria
- High blood pressure (320/200mm.Hg)
- Psychotic Behaviour
- Depression.
- Allergic Reaction

Staging of Adrenal Carcinoma

The WHO classification of 2004 is based on the McFarlane Classification & defines four stages:

I stage – Tumor < 5 cm

II stage – Tumor >5 cm

III stage – Locally invasive tumors

IV Stage – Tumor with distant metastasis

DIAGNOSTIC EVALUATION

- ❑ History collection
- ❑ Physical examination
- ❑ Biochemical evaluation
 - ❑ Morning & midnight plasma cortisol measurement
 - ❑ Dexamethasone suppression test
 - ❑ 24 hr urinary cortisol measurement
 - ❑ Serum potassium, plasma aldosterone & plasma renin activity • Abdominal imaging
 - ❑ CT scan
 - ❑ MRI scan

MANAGEMENT

□ Alpha- Adrenergic Blocking Agents:

- Phentolamine
- Phenoxybenzamine (HCL)

Action- Inhibit the effects of Catecholamines on blood pressure.

□ Catecholamine Synthesis Inhibitors:

- Metyrosine

Action- Use pre operatively or for long term management of in operable tumors.



□ Beta Adrenergic blocking agent:

-Propranolol

- Used for patient with cardiac dysarrhythmias or those not responsive to alpha adrenergic blocking agent.

□ Cortico- Steroid replacement:

- To prevent adrenal insufficiency

SURGICAL MANAGEMENT

- ▶ Unilateral or Bilateral Adrenalectomy
 - Removal of one or both adrenal glands according presence of tumor .

Complication: □ Metastasis of Tumor

Chemotherapy:

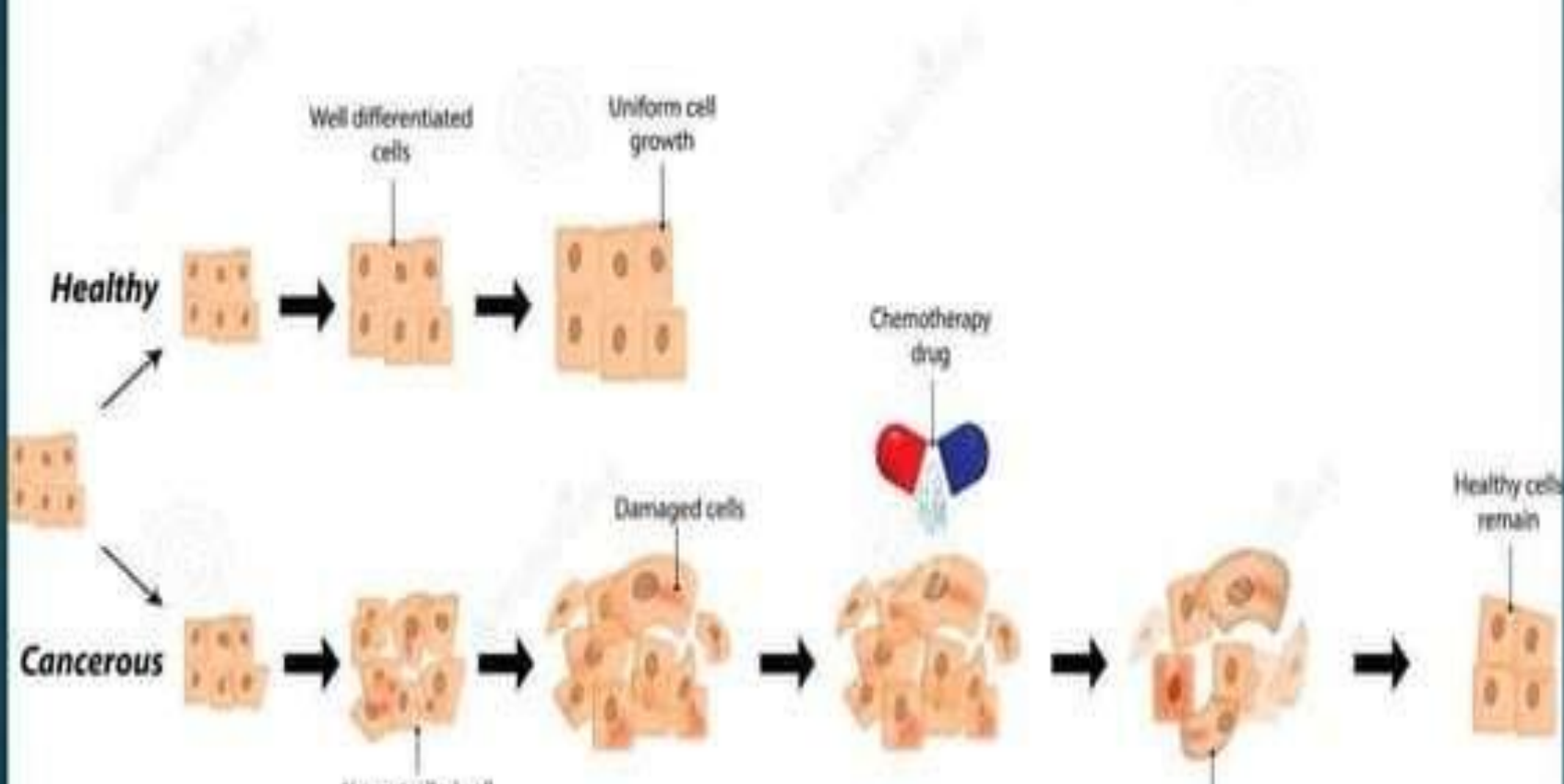
Chemotherapy is a widely used treatment for cancer. The term chemotherapy refers to the drugs that prevent cancer cells from dividing and growing. It does this by killing the dividing cells.

Ex.

- Vincristine
- Nethotrexate



Cancer and Chemotherapy

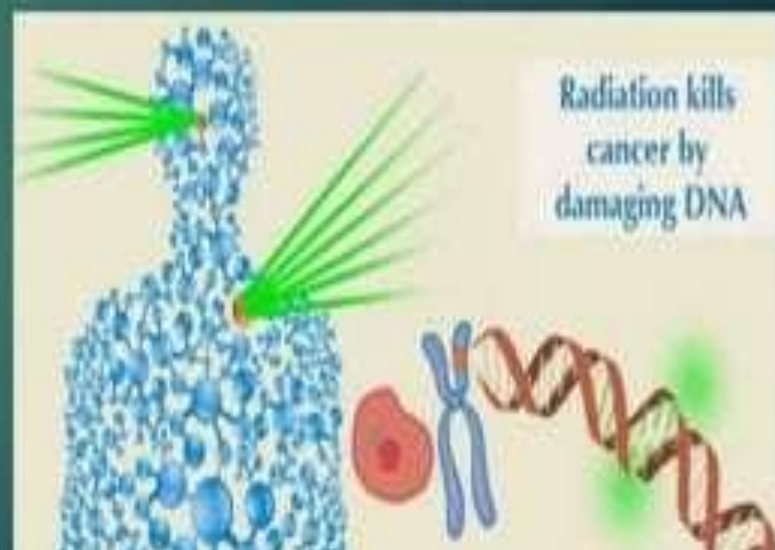


SIDE EFFECT

- ▶ Hair loss
- ▶ Nausea
- ▶ Vomiting
- ▶ Mouth sores
- ▶ Loss of appetite
- ▶ Tiredness, easy bruising or bleeding, and an increased chance of infection.

Radiation therapy

Radiation therapy uses high energy radiation to target cancer cells. Radiation therapy may be used in the treatment of leukemia that has spread to the brain, or it may be used to target the spleen or other areas where leukemia cells have accumulated.





Thank
you