



Non Communicable Disease

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Diabetes Mellitus

- Unable to use glucose for energy
- Due to,
 1. Inadequate amount of insulin in body
 2. Loss of sensitive to hormone insulin.
- Characterized by hyper glycaemia with glycosuria.
- Lack of insulin in body affects carbohydrates, fats, proteins and water electrolytes.

Causes and Risk factors

1. Age
2. Genetic factors
3. Obesity
4. Bad life style
5. Malnutrition
6. Viral infection
7. Stress
8. Alcohol abuse
9. Excessive use of corticosteroids

Sigh and Symptoms

1. Excessive urination (Polyuria)
2. Excessive Thirst & Dry mouth (Polydypsia)
3. Increased hunger (Polyphagia)
4. Lack of energy
5. Blurred vision
6. Delayed wound healing
7. Burning sensation of feet
8. Weakness & fatigue

Complications

1. Short term complications
2. Long term complications
 - a. Retinopathy
 - b. Neuropathy
 - c. Nephropathy
 - d. Heart diseases

Prevention & Control

Primary Prevention

- By maintaining normal body weight by,
 - a) adopting healthy habits
 - b) balancing diet
 - c) regular exercise
- Avoiding Alcohol
- Avoiding smoking tobacco
- Avoiding stress

Prevention & Control

Secondary Prevention

- Patient should take his care according to medical advise
- By maintaining normal body glucose level by,
 - a) using insulin
 - b) proper diet
 - c) using oral anti diabetic drugs.
- Patients should take care of his skin and feet wounds
- Proper treatment of diabetes complications.
- By establishing diabetic clinics

Prevention & Control

Drugs used in diabetes

1. Insulin
2. Oral Hypoglycemic Agents
 - a. Sulphonyl area:
E.g.: Chlorpheniramine
 - b. Biguanides:
E.g.: Metformine



Cardio vascular disease

1. Hypertension
2. Coronary artery disease
3. Rheumatic heart disease

Hypertension

- Blood pressure more than 140/90 mm of Hg at the age of 20 years.
- Blood pressure more than 160/94 mm of Hg at the age of 50 years or more.
- Defined as blood pressure higher than normal blood pressure 120/80 mm of Hg.
- Hypertension is of 2 types
 - i) Essential or primary Hypertension
 - ii) Secondary Hypertension

i) Essential or primary Hypertension :

- No specific factor or less common

ii) Secondary Hypertension :

- Some identifiable cause

Common symptoms :

1. Headache
2. Palpitation
3. Tiredness
4. Light headedness etc

Causes or Risk factors or Etiology

I. Primary or Essential Hypertension:

- a) Heredity
- b) Race (common in black)
- c) Stress
- d) Salt intake
- e) Alcohol
- f) Smoking
- g) Obesity

Causes or Risk factors or Etiology

2. Secondary or Non Essential Hypertension:

- a) Renal disorders
- b) Endocrine disorders
- c) Cardiovascular disorders
- d) Toxaemia of pregnancy

Prevention and Control

1. Avoid excessive mental & physical strain by modifying life style
2. Low salt diet & Low Fat Intake
3. Avoid Alcoholism
4. No Smoking
5. Regular Exercise
6. Create awareness in in community
7. Self Care
8. Drug therapy

Coronary Artery Disease (CAD)

- Ischemia means inadequate blood supply to local area of heart due to blockage of blood vessels.
- It is defined as acute or chronic form of cardiac disability due to an imbalance between the myocardial supply and demand of oxygenated blood as a result of narrowing or obstruction of coronary arteries.

Etiology

1. **Coronary Atherosclerosis:**

damaged to arteries due to
fatty deposition

2. **Non Atherosclerotic causes:**

Risk Factors

1. Non Modifiable:

- a. Age
- b. Sex
- c. Heredity
- d. Race

2. Modifiable:

- a. Hyperlipideamia
- b. Smoking
- c. Hypertension
- d. Life style
- e. Diabetes mellitus

Control & Prevention

- **Primary Prevention:**

1. Stop smoking
2. Control hypertension
3. Reduce stress
4. Maintain ideal body weight
5. Control cholesterol level with low fat
6. Control diabetes mellitus

Control & Prevention

- **Secondary Prevention:**

1. Use sedative to reduce tension

2. Use lipid lowering agents

E.g.: Atorvastatin

3. Use of

- a. Nitrates: Nitroglycerin

- b. Beta – blockers: Atenolol

- c. Calcium Channel Blockers:
Verapamil

4. Surgery

Blindness

Definition:

- Inability
- to count
- Fingers
- In a day light
- At a distance of 3 meters.

Definition

Blindness is inability to count fingers in a day light at a distance of 3 meters.

Causes

In infants:

Congenital defects, cataract, abnormal enlargement of eye.

In School age :

Xerophthalmia, Malnutrition, Vitamin – A deficiency.

In Adult life :

Myopia, neurological disease, diabetes mellitus

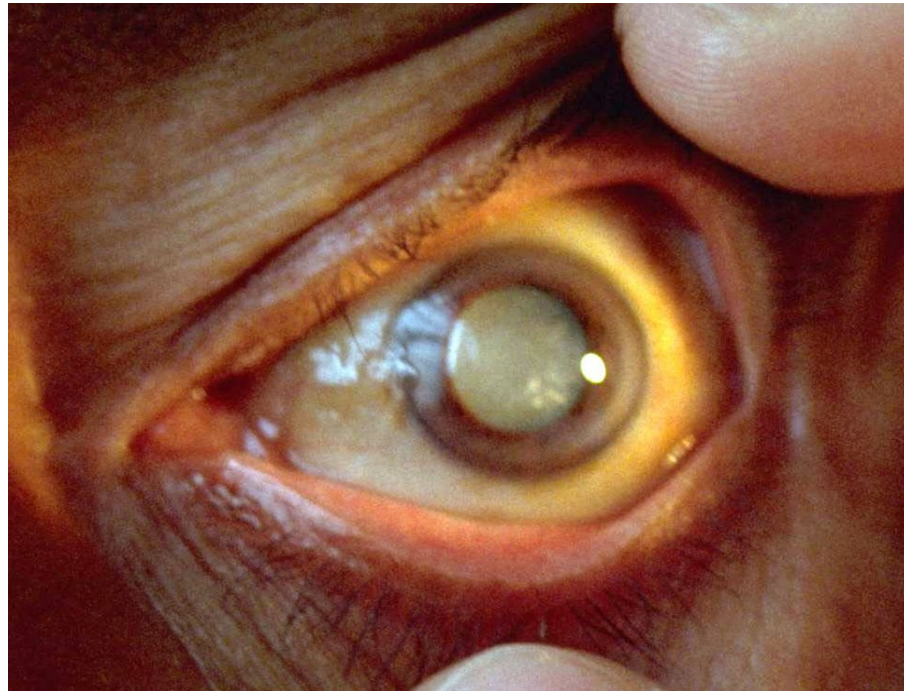
Causes

In late adult age:

Cataract, glaucoma, diabetes.

In elderly persons:

Cataract, glaucoma, myopia, diabetes.



Cataract

Prevention

1. Don't use anyone else towel or handkerchief
2. Don't expose eyes to dust
3. Don't expose eyes to high light
4. Proper care of eyes
5. Proper an complete treatment of eye disease.
6. Use of vitamin-a
7. avoiding excessive stress on eyes.



Rheumatic heart disease

Rheumatic heart disease is an inflammatory disease that occurs following a streptococcus pyrogens infection

Rheumatic heart disease

- Predominantly in children
- Rheumatic fever leads to rheumatic heart disease.
- inflammatory disease
- RF for 1 year – leading to death
- Now reduce risk due to,
 - a. Improved sanitation
 - b. Preventive health measures
 - c. Antibiotics



Causes

a streptococcus pyrogens infection

Clinical manifestations

- Inflammation of joint
- fever
- Involvement of all layers of heart
- involvement of CNS
- Involvement of sub coetaneous tissue
- Involvement of skin

Prevention

Use of drugs:

- Treated with injection of benzathine penicillin
- Erythromycin use.

Health education:

- Personal hygiene
- Good diet



Any question???



THANK YOU...