DIABETES AND THE EYE
EPIDEMIOLOGY

• Commonest cause of blindness in the population of working age in developed countries

• Prevalence of DR of any severity in the diabetic population is 30% and prevalence of blindness due to DR is approximately 5%
RISK FACTORS

• Duration of DM
• Control of DM. Will not prevent but delays
• Hypertension
• Renal Disease
• Pregnancy
• Obesity, hyperlipidaemia, smoking, anaemia
CLINICAL CLASSIFICATION OF DIABETIC RETINOPATHY

• Background
• Pre-proliferative
• Proliferative
• End-stage diabetic eye disease
Background

- Microaneurism
- Exudate
- Blot haemorrhage
Diabetic maculopathy

Hard exudate
Proliferative retinopathy

- NVD
- NVE
- Pre-retinal haemorrhage
- Laser burn scars
Advanced diabetic eye disease

Preretinal fibrosis and tractional retinal detachment

Rubeosis iridis
End-stage diabetic eye disease

- PHTHISIS
  Shrunken, soft eye with opaque vascularised cornea and no visual potential
TREATMENT

- **LASER**: Light Amplification by the Stimulated Emission of Radiation
  - Focal
  - Grid
  - Panretinal photocoagulation
SCREENING

• No retinopathy or BDR with normal vision
  – See yearly, or sooner if vision deteriorates

• Refer to ophthalmologist
  – BDR with macular changes
  – BDR with decrease in vision
  – Pre-proliferative retinopathy
  – Proliferative retinopathy