

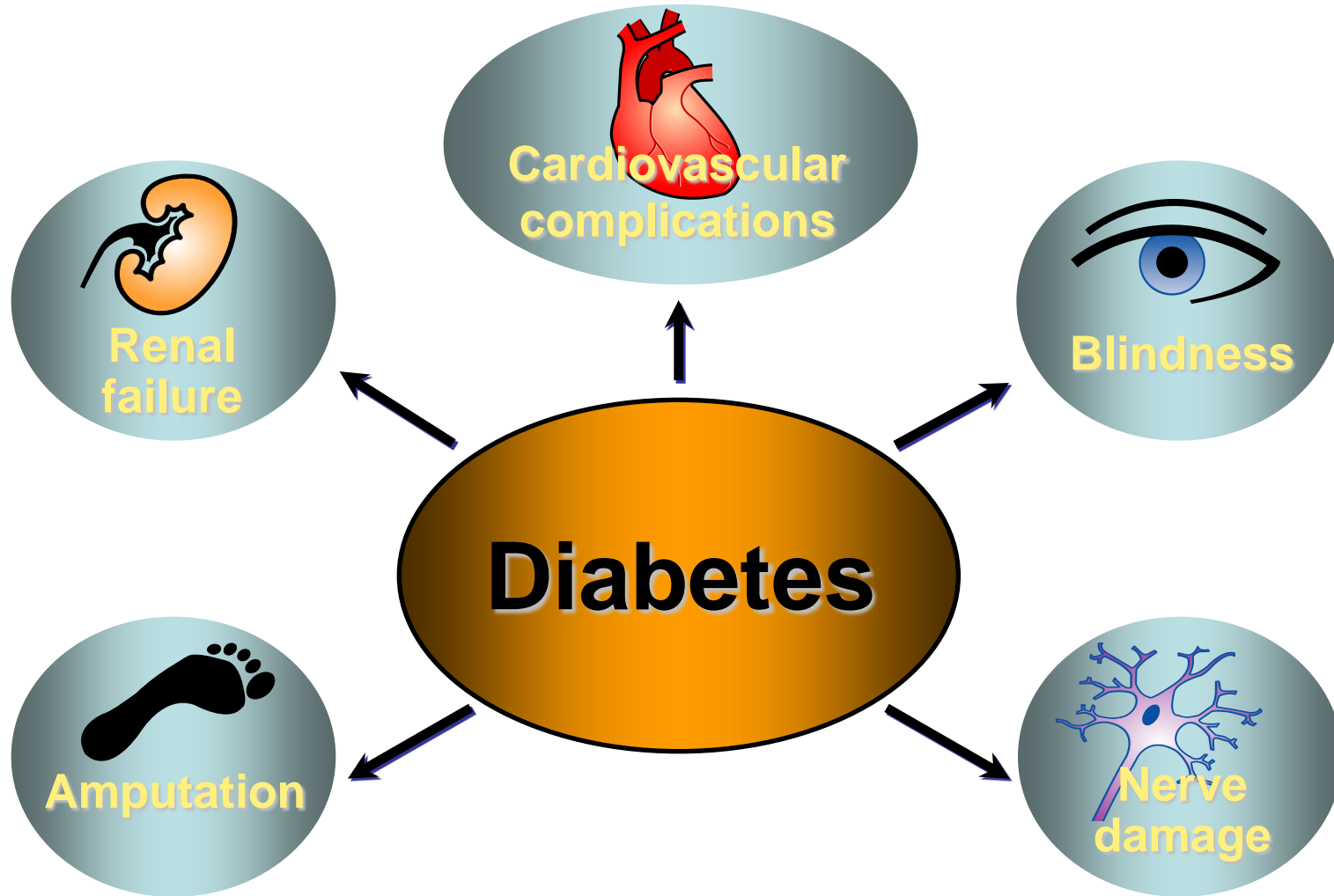
Slow poisons

- Sugar

- BP

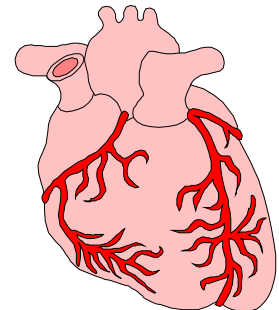
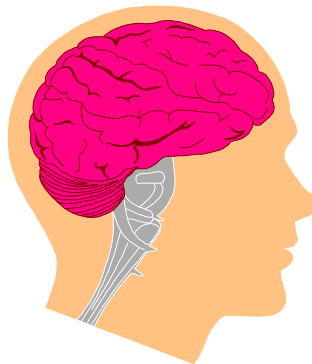
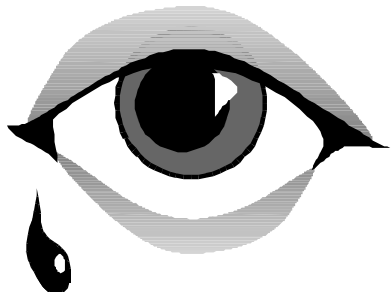
Cholesterol

Complications of Diabetes



Why to control Diabetes ?

- If not controlled Diabetes can lead to serious complications of eyes, kidneys, heart, nervous system.
- Therefore, diabetes needs to be controlled strictly.



Complications of Diabetes

Eye Diseases: Retinopathy

What you can do to Preserve your Vision

Fortunately, retinopathy can be prevented
and controlled

- Practice tight control.
- Get an eye exam every year.
- Reduce your blood pressure.



b



NPDR

Severe NPDR

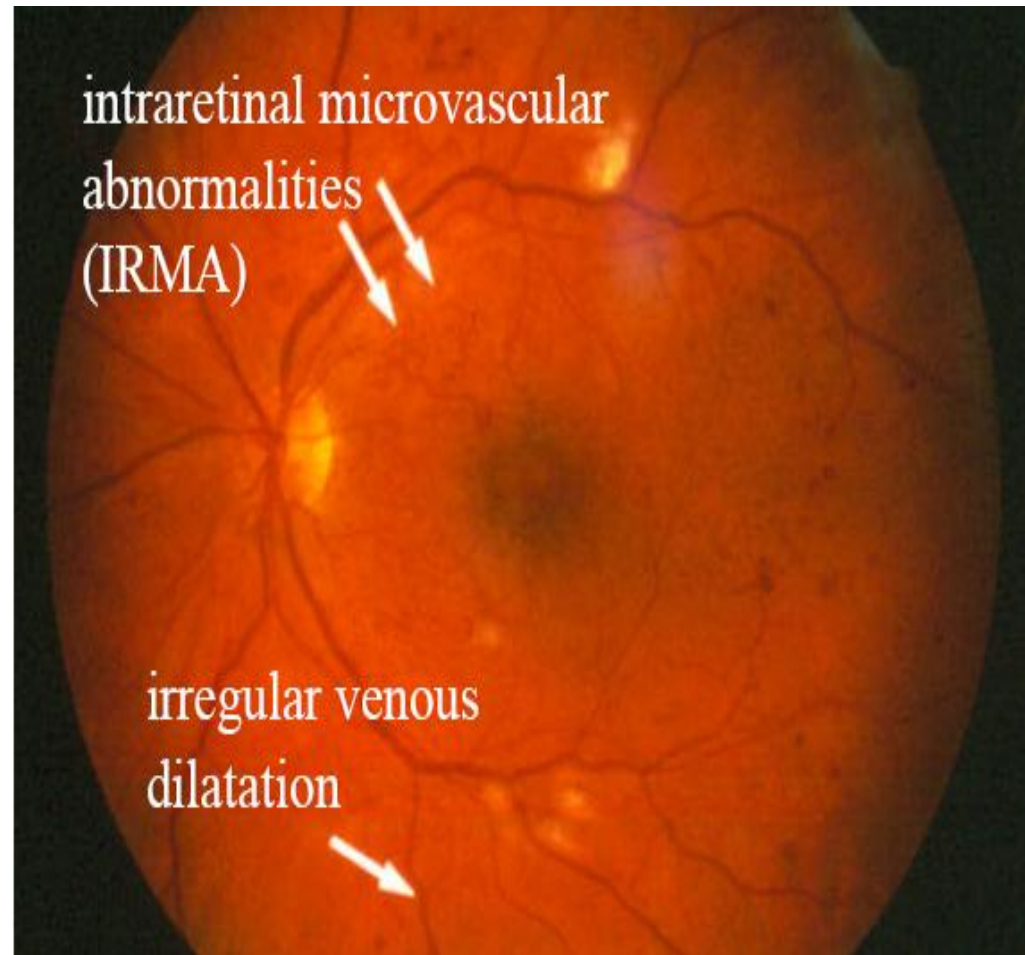
Any of the following:

≥ 20 Intraretinal hemorrhages
in 4 quadrants

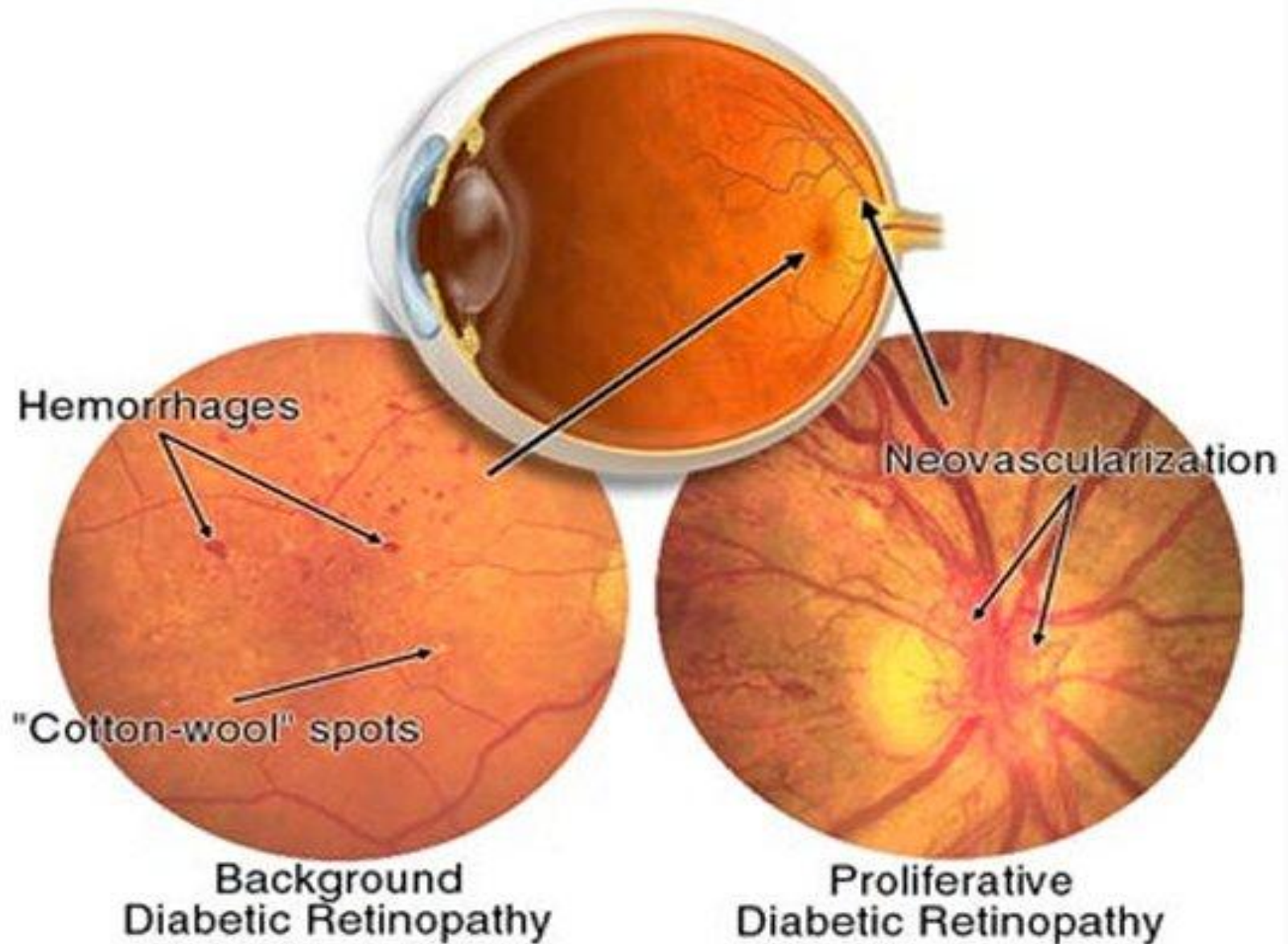
Definite venous beading in
 ≥ 2 quadrants

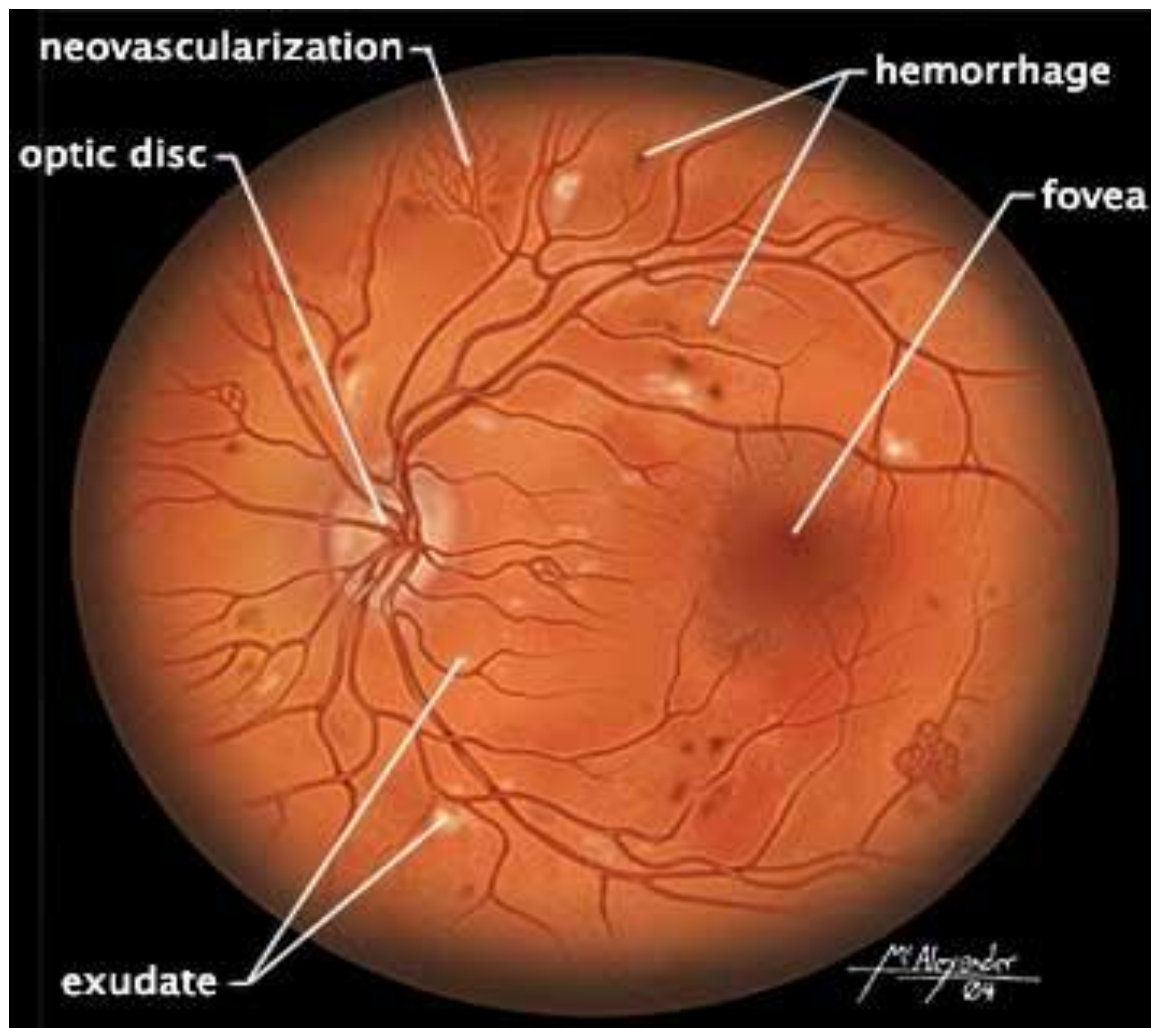
Prominent IRMA in ≥ 1
quadrants and no
neovascularization

Very Severe NPDR
 ≥ 2 of above



Diabetic Retinopathy



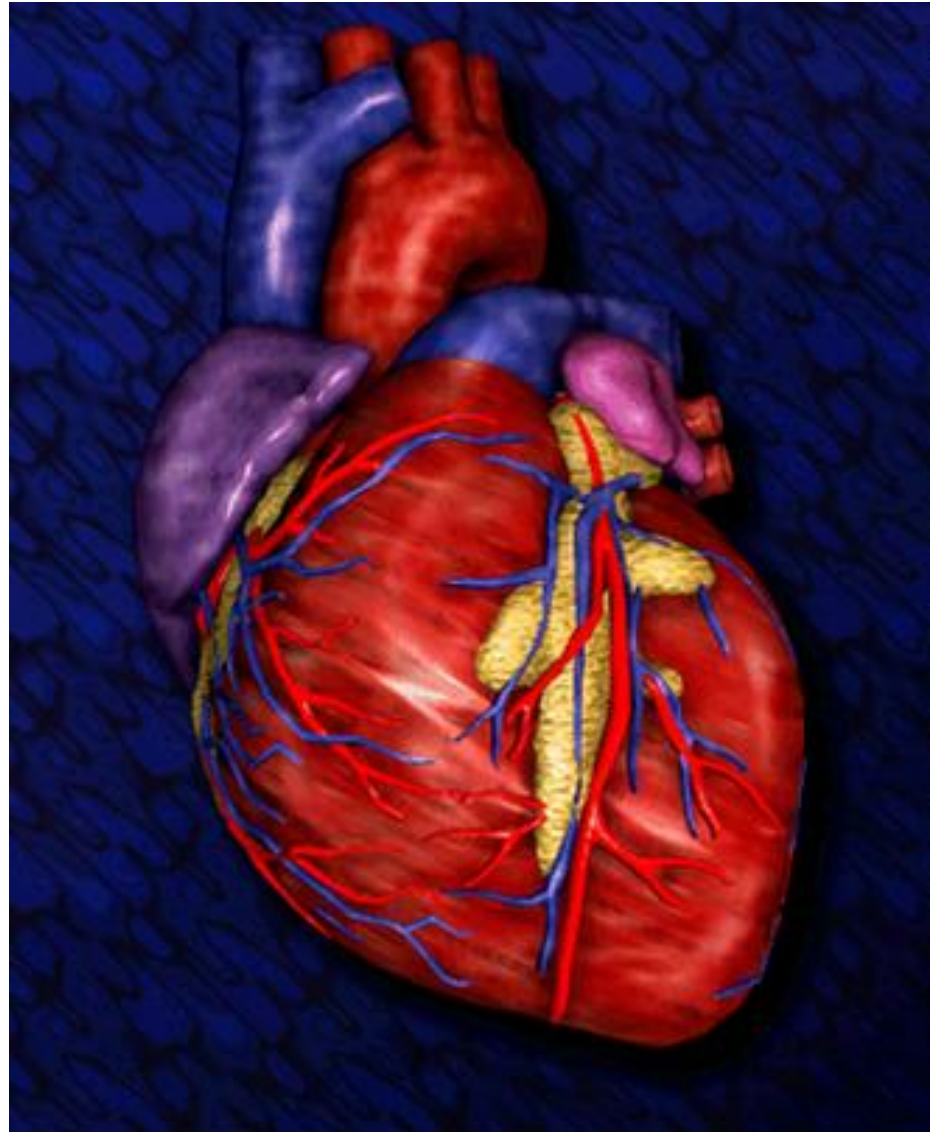




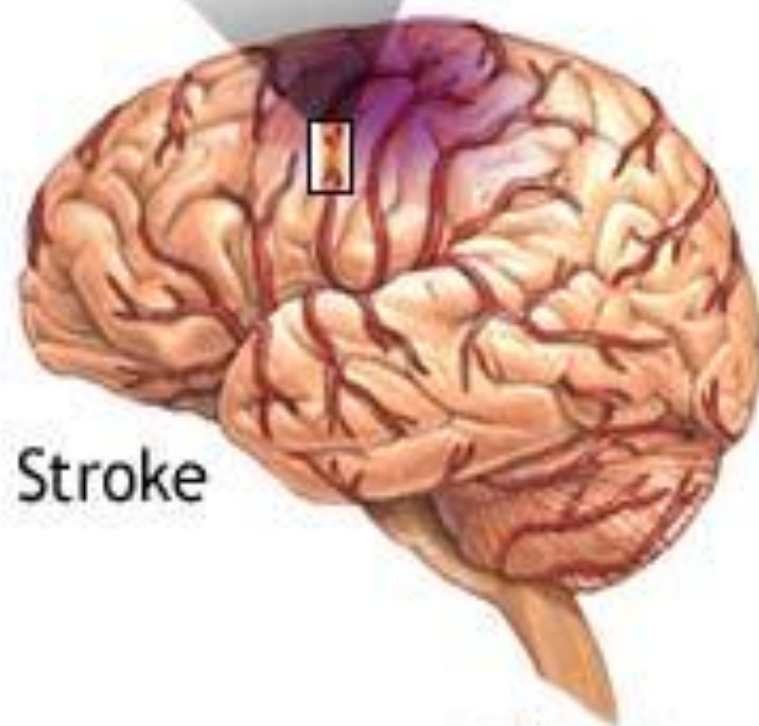
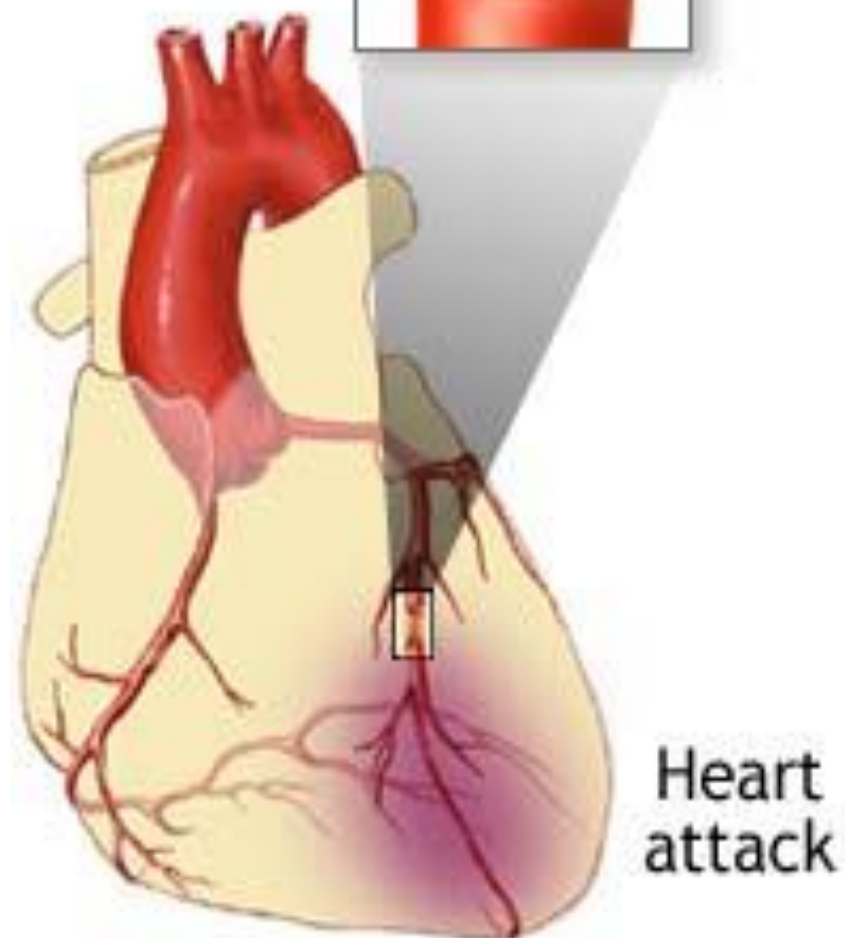
Type 2 Diabetes : Impact of Cardiovascular disease

- **Framingham Study: (Mortality in DM patients)**
 - 80 % due to Cardiovascular disease
 - 75% : CAD
 - 25% : Stroke
- 2-4 fold increased risk

- 80% of diabetic patients die of cardiovascular disease
- 75% Heart disease, 25% Brain Stroke
- Heart disease 2-3 times more
- MI equivalents



Blood
flow
blocked
by plaque





Hammer toe



Trapezium

- The best way to prevent neuropathy is to practice tight blood glucose control.



Intrinsic - Minus Foot



Sign of Motor Neuropathy







5/15/2018
15-2-2018



**Oedema
of Legs**

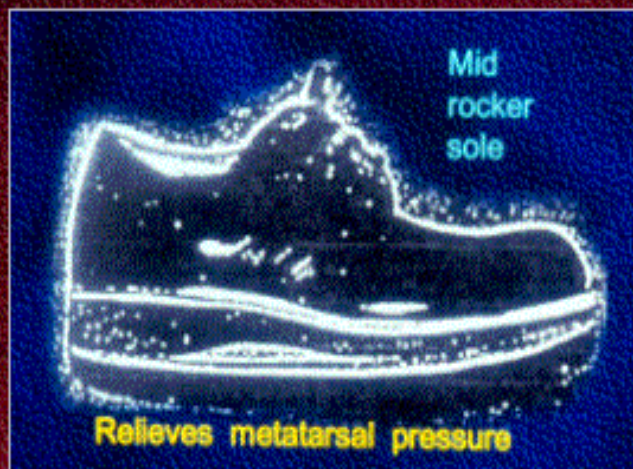
Role of Surgery

Skin grafting



Late presentation





Mid-rocker sole



Toe-only rocker sole



Double rocker sole



Severe angle rocker sole



Foot complications in Diabetic patients

- 50% I-limb amputations other than trauma are a consequence of diabetes
- ↑ Risk of amputations – 15 times high
- 50% of diabetes related hospital admissions are for foot disease
- 50%, contra lateral limb amputation in 4 yrs

Diabetic neuropathy

Diagnostic tools

Biothesiometry

Tip Therm



MONO FILAMENT



Complications of Diabetes

Nervous System Problems - Neuropathy

- It affects 65% of people with diabetes.
- Poor blood glucose control is at the root of neuropathy.
- Symptoms may include:
 - A loss of bowel or bladder control.
 - Problems with digestion.
 - Muscle weakness.
 - Sex problems.
 - Pain
 - feeling in the hands or feet, or a loss of pain sensation in the extremities, which may contribute to such problems as foot ulcers.



Magnitude of the problem

- 20 % of all diabetic patients get diabetic kidney disease (DIABETIC NEPHROPATHY)
- 25 % of all patients undergoing dialysis & Kidney transplant are diabetic patients

DIABETES & Blood pressure control

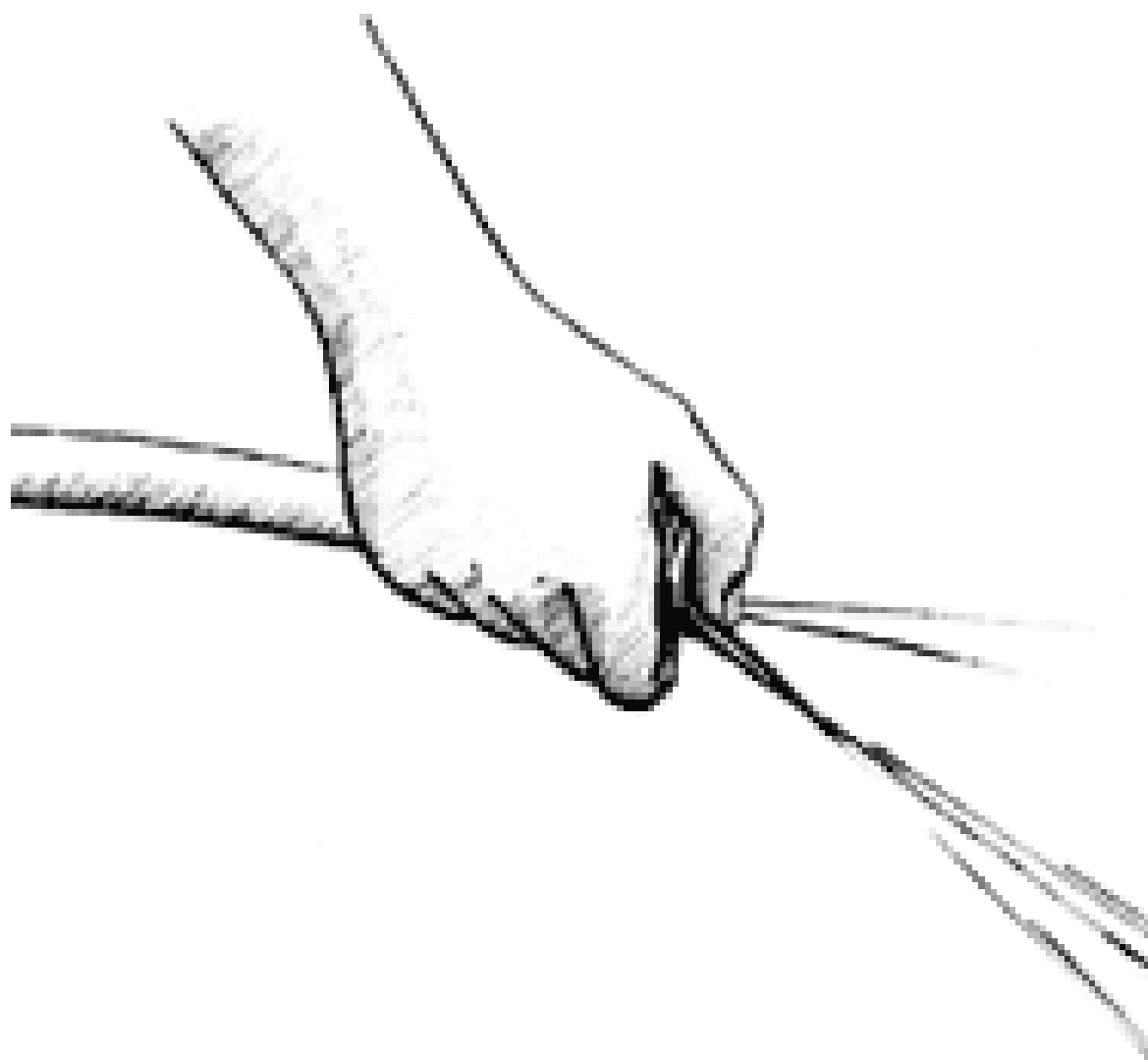
Tight blood pressure control (BP < 140/80 mm of Hg)

Reduces the risk of
Any diabetes related end points : 24%

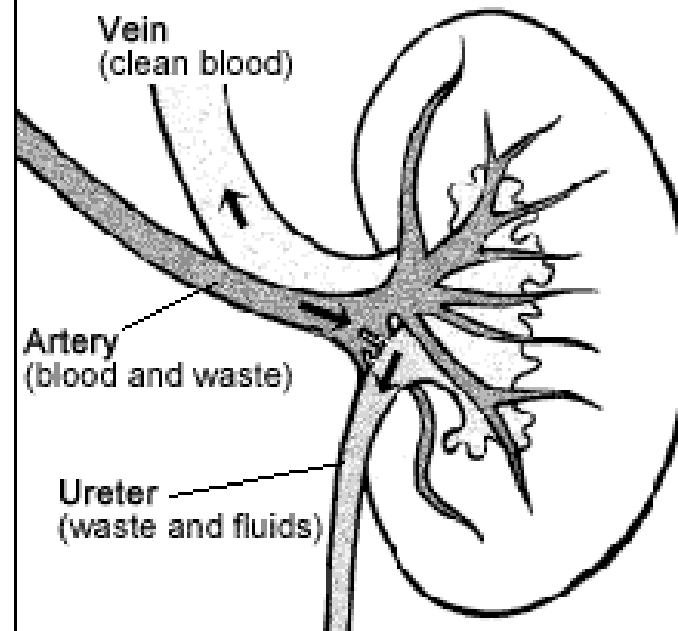
Diabetes related deaths:
32%

Stroke : 44%

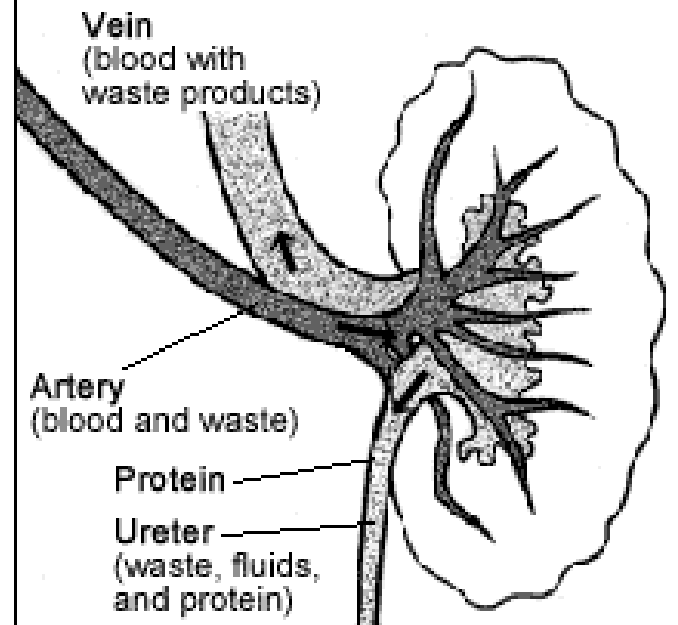
Microvascular end points
:37%

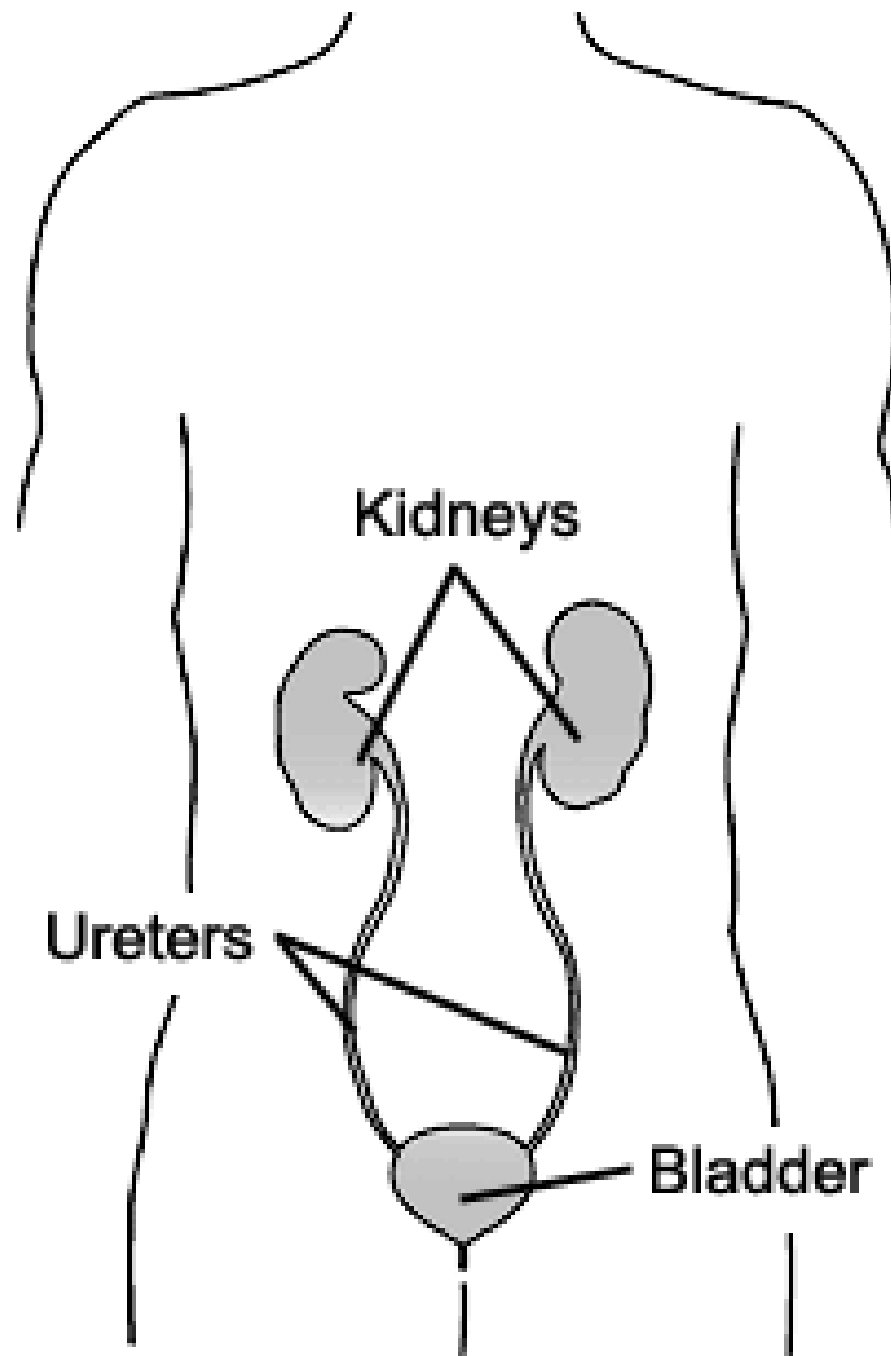


Healthy kidney



Unhealthy kidney





Prevention of diabetic kidney disease

- **Target group approach:**
 - a) Hypertensive diabetic patients
 - b) DM with f/h/o DM-Nephropathy
- Glycemic control
- Aggressive HTN control
- Quit smoking
- Dietary protein-restriction