

The Diabetic Foot – Managing the Risk Factors

Dr Ketan Dhatariya

Clinical Lead – Diabetic Foot Clinic

NNUH

What is Diabetes?

“A complex metabolic disorder characterised by chronic hyperglycaemia resulting from defects in insulin secretion or insulin action, or both”

First described in 1552 BC in the Ebers papyrus



Two Main Types

- Type 1
 - Autoimmune destruction of the β cells of the Islets of Langerhans in the pancreas. This leads to an absolute insulin deficiency. Insulin treatment is therefore mandatory
 - Previously known as IDDM or juvenile onset diabetes

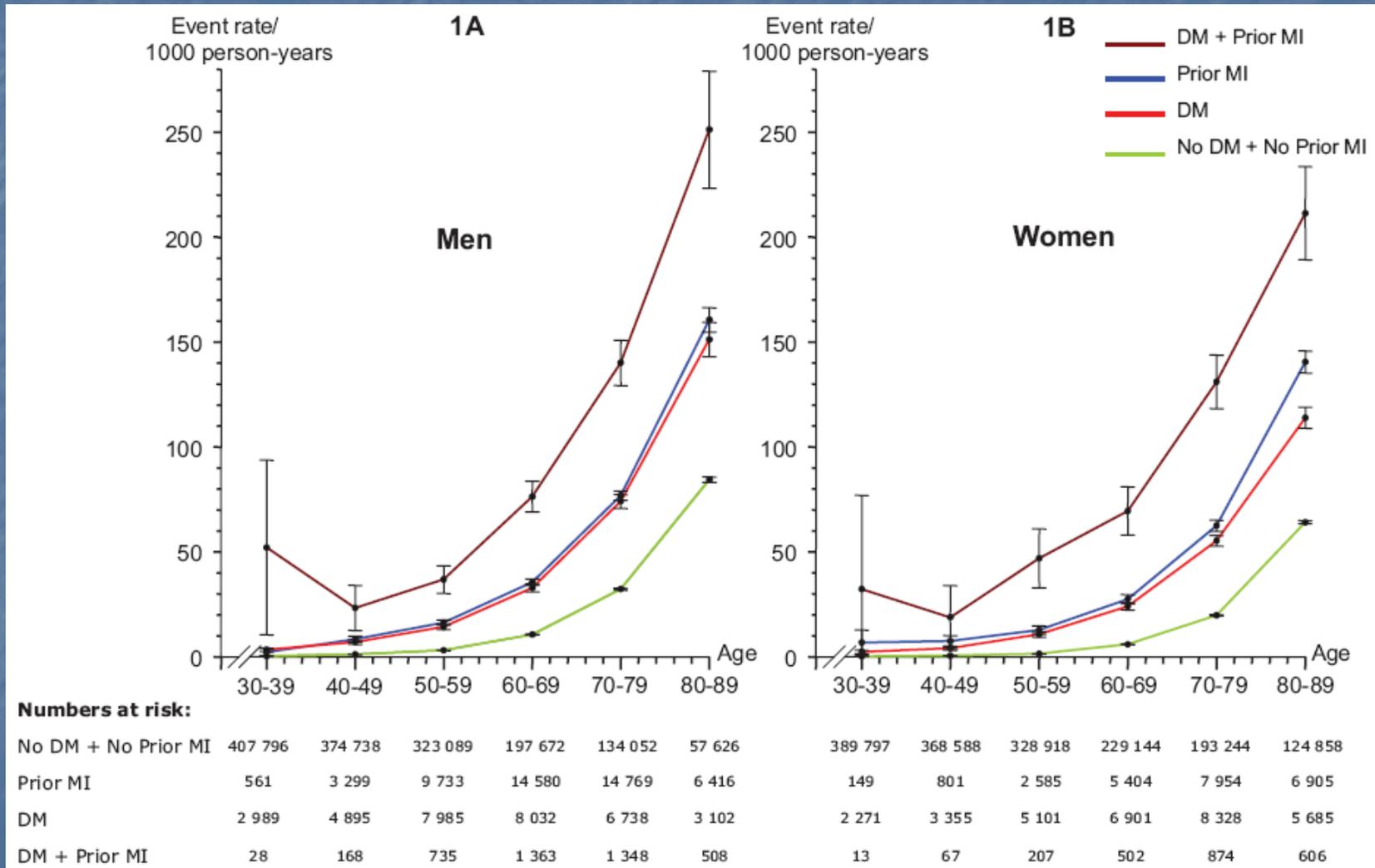
Two Main Types

- Type 2
 - Impaired insulin action (insulin resistance) and eventually, impaired insulin secretion as well
 - Usually treated with oral medication initially, then may move onto insulin
 - Formerly known as NIDDM or maturity onset diabetes

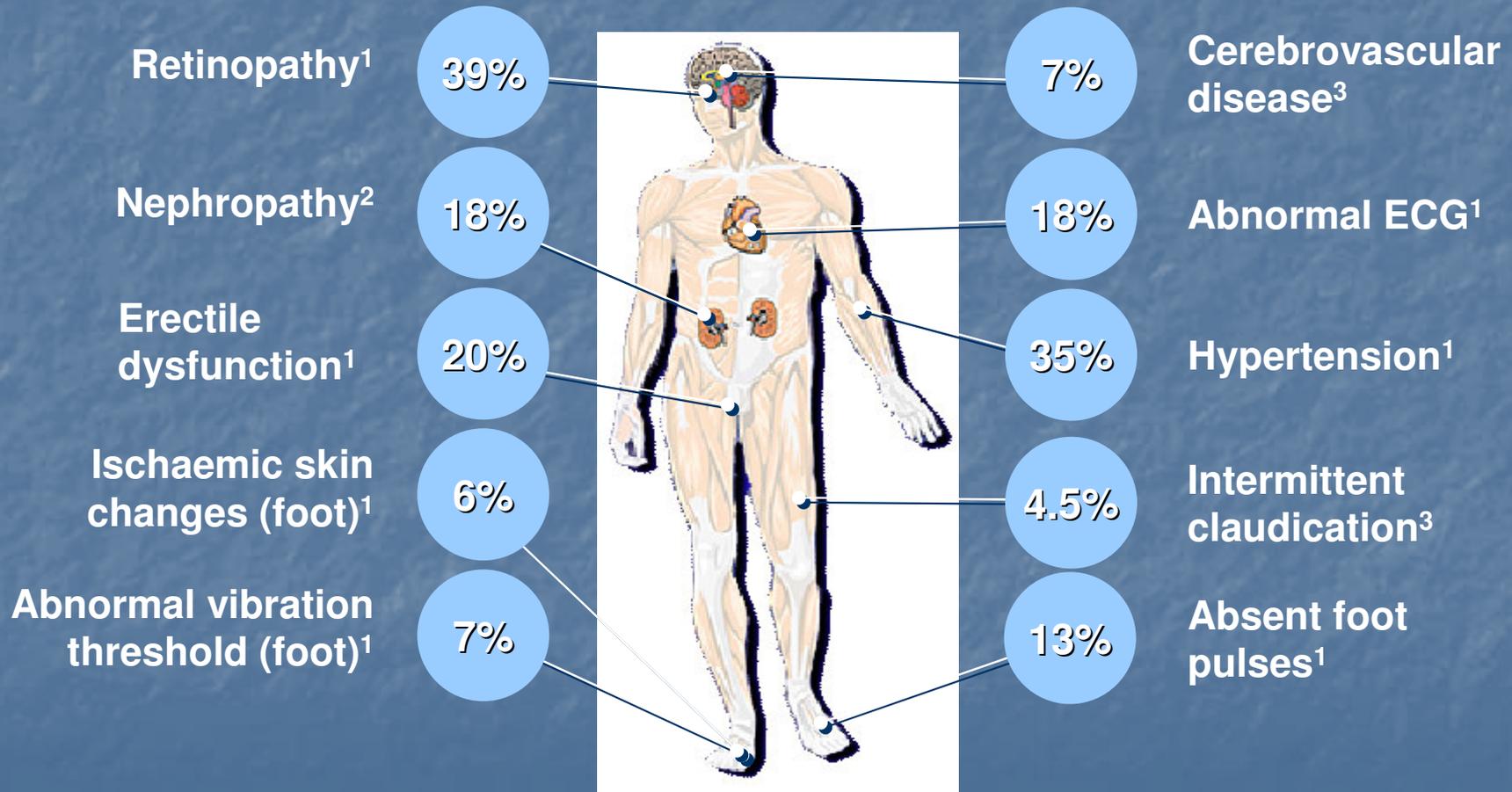
What Are the Risks??

- Poorly controlled diabetes leads to accelerated cardiovascular morbidity and mortality
- A combination of microvascular and macrovascular disease

Data From 3.3M Danes



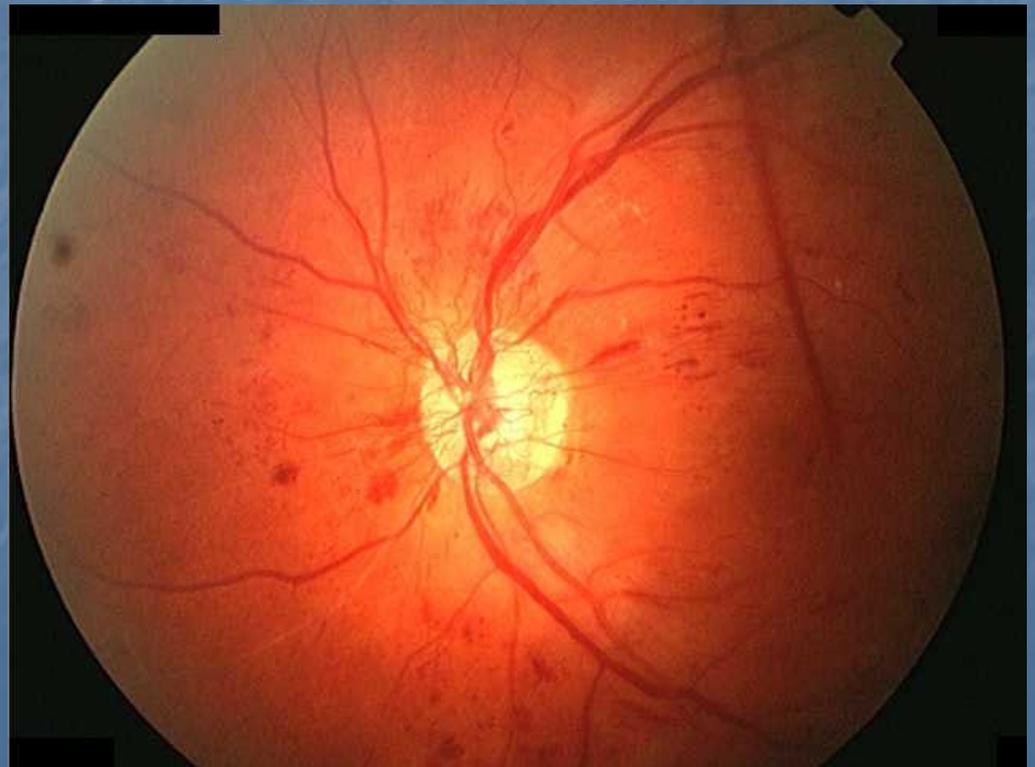
Vascular Complications Of Type 2 Diabetes At The Time Of Diagnosis



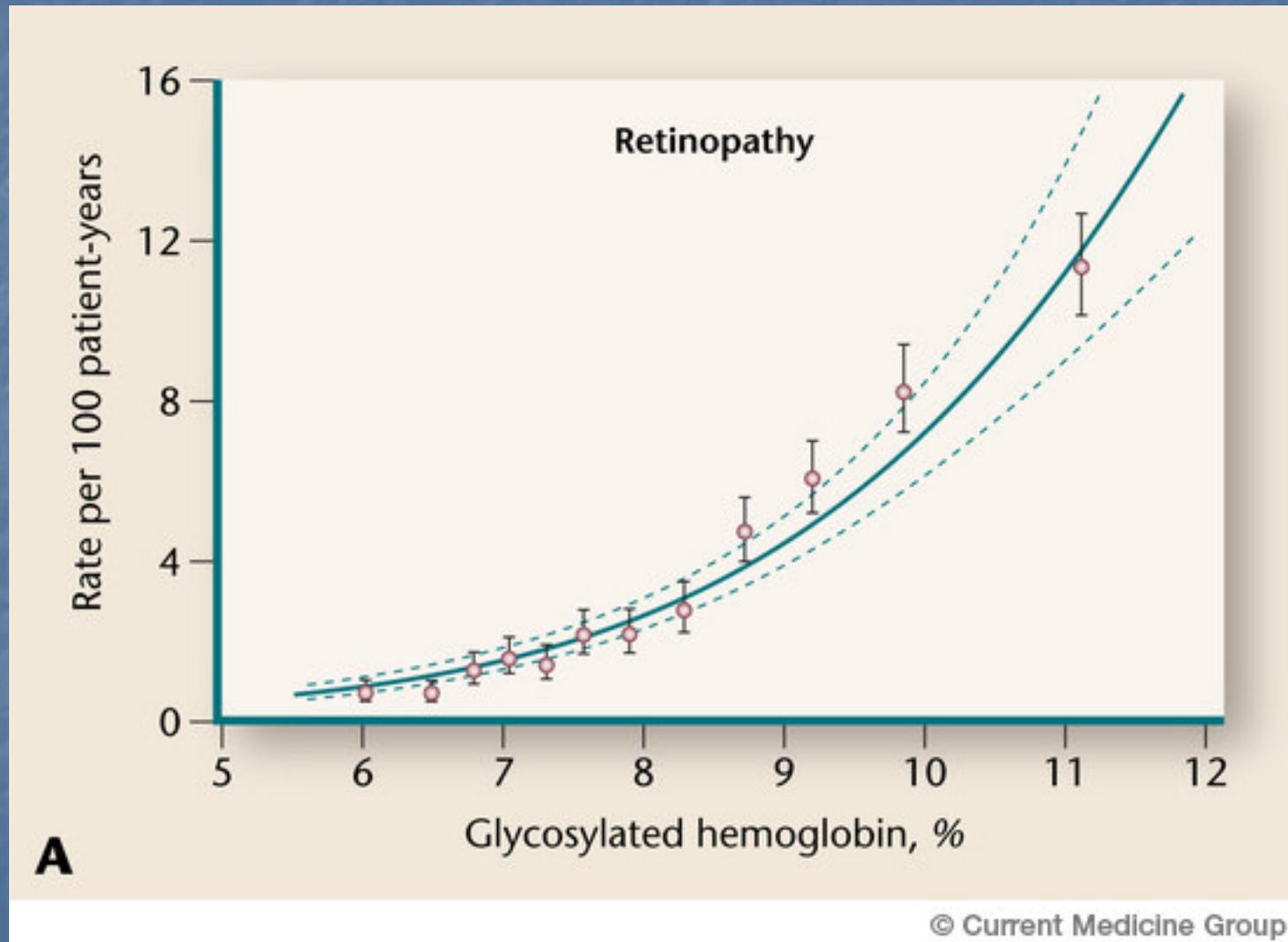
1. UKPDS 33 Lancet 1998;352(9193):837-853. 2. The Hypertension in Diabetes Study Group. *J Hypertension* 1993; **11**: 30-17. 3. Wingard DL et al. *Diabetes Care* 1993; **16**: 1022-5.

OK, so You Die – So What?

- Diabetes remains:
 - The most common cause of blindness in the developed world



Retinopathy and Glycaemic Control



OK, So You Go Blind Before You Die

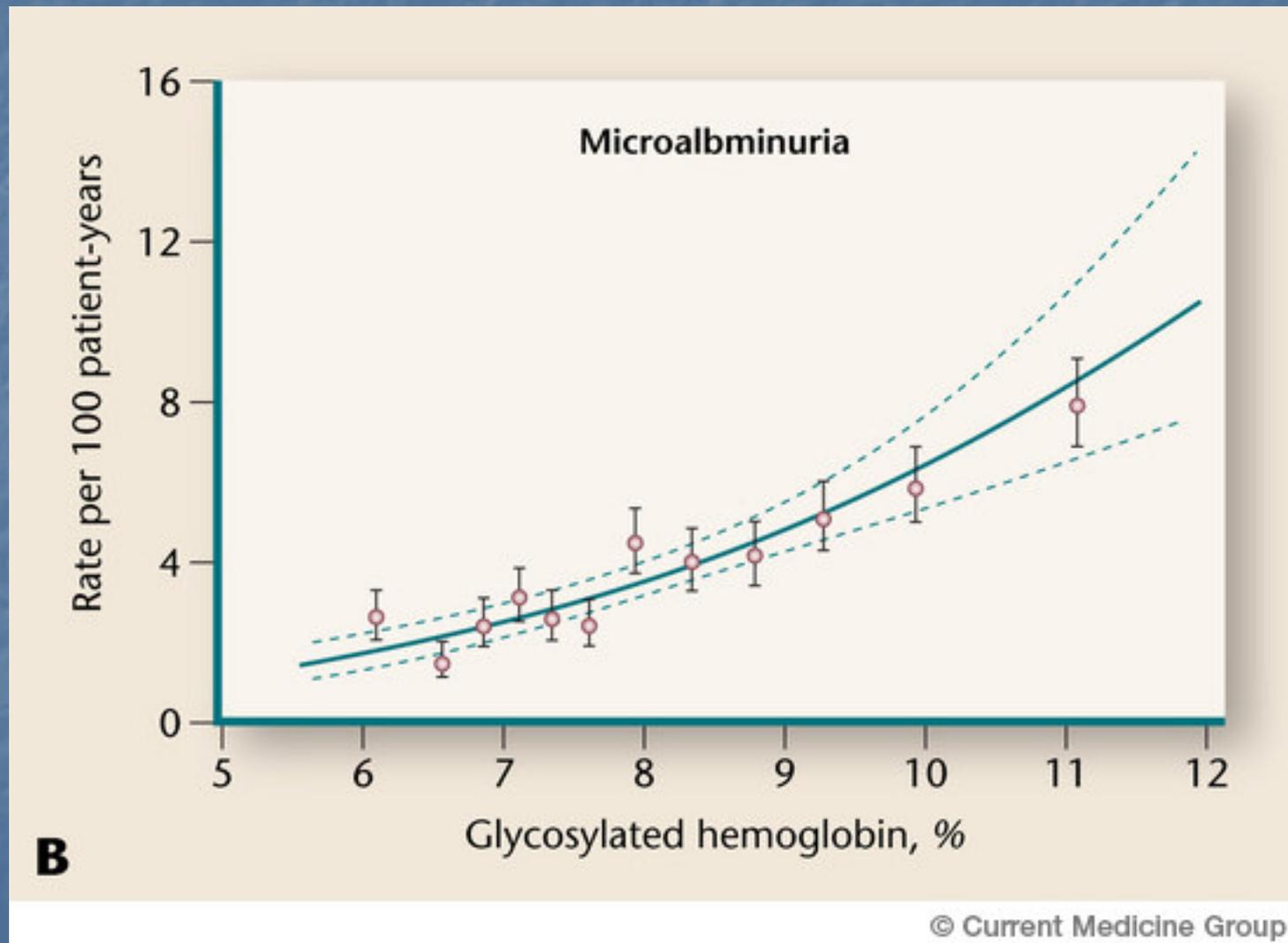
- It is the most common cause for non-traumatic lower limb amputations in the world – in the UK, 50% of these occur in the 4% of the population who have diabetes



OK, So You're Blind and Limp

- Diabetes is the most common cause of end stage renal disease in the world

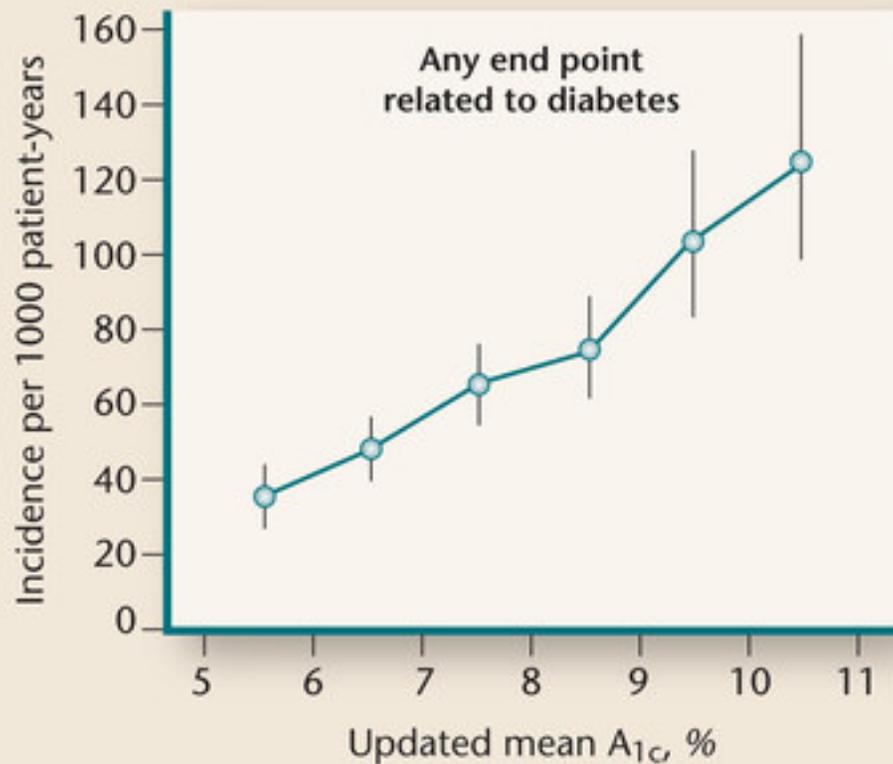
Nephropathy and Glycaemic Control



Blind, Limp and on Dialysis

- You have a 2 – 3 fold increased risk of macro-vascular risk
 - i.e. strokes and heart attacks

Glycaemic Control is Important



Reduction in risk per
1% reduction in A_{1c} (9 mmol/mol)

Overall: 21%*

Diabetes mortality: 21%*

MI: 14%

Stroke: 12%†

Microvascular: 37%*

Heart failure: 16%†

Cataract extraction: 19%*

Amputations or PVD death: 43%*

* $P < 0.0001$.

† $P < 0.05$.

© Current Medicine Group

UKPDS Lancet 1998;352(9131):837-853

Blind, Limp, on Dialysis and Someone Wiping your Bottom

It's all preventable

So What Can YOU Do?

- Be active
 - Ask if they take their medications every day
 - Ask if they experience any side effects
 - Ask if they have mentioned any of these things to their doctors
 - TELL THEM TO STOP SMOKING
- Be their advocate

The Diabetic Foot – Managing the Risk Factors

Dr Ketan Dhatariya

Clinical Lead – Diabetic Foot Clinic

NNUH

www.drketandhatariya.com