Common Comorbidities *

Co-morbidities related to DM2

- CAD (19%)
- Neuropathy(19%)
- Nephropathy (19%)

Co-morb.s unrelated to DM2

- Hypertension (57%)
- OA (28%)
- Chronic back pain (23%)

*Spann et al 2006

Management

Management must be tailored to the individual

"*the good physician treats the disease, the great physician treats the patient who has the disease*" William Osler

What is the role of the GP in Management?

Diet – Exercise- Education

Targets

Fasting blood sugar 4-7

HBA1C 48-58

TC <4 or reduced by 25%

LDL <2 or reduced by 30%

BMI 25-30

BP <140/80 (<130/80 if CKD, foot or eye problems)

Diabetes review programme

Diet & exercise
Psychosocial
Education
Lifestyle→ smoking, alcohol,
Medication
Risk factor control- BP, lipids
Smoking, alcohol
GI syms (gastroparesis)
In men- ED
Foot review
Vaccination- SIP, PC
Bloods
Refer

Diabetic foot

- Ulceration
- Callus
- Infection
- Inflammation
- Deformity
- Gangrene
- Charcot arthropathy

Referral

- Retinopathy screening
- Community dietician
- Structured education programme: DESMOND, CODE

http://www.digp.ie/diabetes-structured-education-programmes/

- Chiropody
- Podiatry
- Clinical nurse specialist
- Diabetes Ireland www.diabetes.ie
- Secondary care- only if uncontrolled

Glycaemic control

- Good control at the outset reduces complications
- ‘the legacy effect’*
- Exceptions- elderly, hypoglycemia, co-morbidities
- Therefore, it’s not all about getting glucose down
- First line: healthy eating, weight control, exercise, edcuation
- Second line: metformin unless

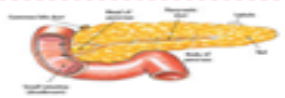
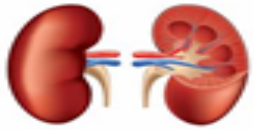
*UKPDS

Screening for complications in DM2

Cardiovascular disease	Baseline ECG Pedal pulses BP regularly
Neuropathy	Screen for gastroparesis Screen for ED Foot exam
CKD	Screen at dx and annually if clear If ACR>2 or eGFR <60…CKD→ screen frequently (6 monthly)
Foot care	Examine at dx Screen at least yearly
Retinopathy	Screen every 1-2 years More frequently if disease present

Canadian Diabetes Association, 2013

Oral hypoglycaemics

Biguanide	METFORMIN	Increases sensitivity to insulin in liver	Effective Hypos rare Slight wgt loss	GI side eff	Lactic acidosis Kidney damage
Sulphonylureas 	GLICLAZIDE	Increase insulin secretion from B-cells	Effective	Hypos Weight gain	Beware B-cell burn out over time Beware CKD
Thiazolidinediones 'glitazones'	PIOGLITAZONE	Increase insulin sensitivity all over body	Effective Low risk of hypos	Weight gain	CI in HF
DDP-4 inhibitor 	SITAGLIPTIN	Delays breakdown of GLP-1 increasing effect of insulin	Weight neutral Less risk of hypos	Not as effective as above	Pancreatitis URTIs
SGLT2 inhibitor 	DAPAGLIFLOZIN	Increases glucose loss in kidneys	Weight loss Low risk of hypos	UTIs	CI in CKD Beware in dehydration or with diuretics
GLP-1 analogue	EXANATIDE	Mimics GLP-1 Increasing effect of insulin	Effective Weight loss Low risk of hypos	GI side effects	Pancreatitis ?? pancreatic CA

*UKPDS

Blood pressure control

Targets:

- **<140/80** in uncomplicated DM
- <130/80 if kidney, eye, cerebrovascular complications

Medication:

- Any BP med can be used
- ACE-i 1st line if CKD or PU (ARB if not tolerated)
- CCB if pregnancy likely
- TLD

Lipid control

- Use qrisk-2 to calculate
- If 10 year risk is >/= 10% → STATIN

https://www.qrisk.org/2016/

What about aspirin?

- Only use aspirin if established vascular disease