West Herts Diabetes Renal Pathway

All patients with DM screened at primary care annually

U+Es , eGFR, microalbuminuria – see table 1

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Exclude UTI

- Exclude Overt Protein
  Autoimmune screen ANA ANCA - if positive → **Renal**
- Exclude Myeloma (Protein Electrophoresis)
  Bence Jones proteins in urine - if positive → **Haematology**

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- Tighten Diabetes Control Preferably with ACE inhibitors or ARBs
- BP 130/80 mmHg (140/90 if prone to falls, orthostatic hypotension)
- Lipid Management (follow NICE guidelines)

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Check U+E's 2 weeks after starting ACE or ARB (Expected decline in eGFR and rise in K up to 5.9)

If > than that, query renal artery stenosis → **Renal**

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- US KUB
  - if obstructed → **Urology**
  -If renal asymmetry? Renal Artery Stenosis → **Renal/Diabetes for Renal Angiogram**
- If Haematuria and UTI excluded and autoimmune screen negative → **Urology**

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Monitor eGFR as guidelines (see table 1)

Plot eGFR on ICE

if falling with increased steepness ie >5 ml/min (advise fasting sample and good hydration before test)

- US KUB
- Autoimmune screen, if positive → **Renal**
- Myeloma Screen, if positive → **Renal + Haematology**

Monitoring renal function and screening for complications

If eGFR < 45ml/min when patient not acutely unwell

1. **Screen for Anaemia (FBC) 6/12**
   Exclude other causes
   B12, Follate, Ferritin and Iron Studies
   If TSAT <30% and Ferritin <500, will need iron replacement. Trial Oral if no improvement
   Renal for IV +/- EPO
   →

2. Check Bone Profile Vit D and PTH

If Phosphate High → **Renal (dietician and phosphate binders)**

If Vit D deficient, treat with Vit D alone and no calcium supplements, doses per Vit D guidelines

If PTH raised but normal phosphate + Vit D, check 6/12

If rapid Rise > 3x upper limit of normal → **Renal for 1-Alfa**

Does Patient have significant retinopathy? If not, non-diabetic nephropathy to be considered.

Diabetes Renal Pathway When & Where to refer

REFERAL EXCLUSIONS:

- **NH Residents**
- **Age >75**
- **Active cancer treatment (*if treatment includes steroids might still need DSN to help diabetes control)**

Indications to refer to Diabetes Clinic

- **Poor diabetes control (hypos or inappropriately high HbA1C) despite maximal oral management (list medication tried and results)**
- **Deterioration of diabetes control after metformin discontinuation in patients with eGFR below 30 ml/min**
- **Patients with DM treated medically on renal replacement therapy**
- **Patients with DM who had kidney/ pancreas transplant**

Indications for referral to Renal Clinic

- **Linear decline in renal function increasing steepness (eGFR graph on ICE)**
- **K > 5.9 mmol/L on 2 consecutive samples**
- **Phospate > 2.0 mmol/L on 2 consecutive samples**
- **Anaemia of chronic disease Hb< 110, requiring IV iron and/or EPO**
- **Suspicion of RAS**
- **eGFR<= 30 mL/min consistently and falling**

Diabetes and renal team will discuss investigations and F/U in MDT

Diabetes team will review dialysis patients with diabetes a month after starting on dialysis

Pts may be discharged from the clinic with instruction for further follow up in primary care