The correct treatment process if you have excess protein leakage from your kidneys

The urine sample you bring to your annual diabetes review, checks how much protein is leaking from your kidneys. Excess protein leakage is an early sign of structural kidney damage and if caught early, can be successfully treated with specific blood pressure and diabetes medications. A result of 3mg/mmol or more is considered to be clinically significant. A second, early morning urine test is required to confirm the diagnosis of microalbuminuria (small particles of protein in the urine).

Your most recent urine **Albumin Creatinine Ratio** results are

and

Having been diagnosed with microalbuminuria it is important to aim for an HbA1c (diabetes blood test) of 53mmol/mol or less and a blood pressure below 140/90mmHg.

Your most recent **HbA1c**

and **blood pressure**

The recommended process for starting two kidney protective medications is described below. You may already be taking one or both of these medications but for the best kidney protection, the dose may need increasing in the **Medication 1** category.

Medication 1: starting an ACE inhibitor or Angiotensin Receptor Blocker

These are blood pressure medications that also protect your kidney. For maximum kidney protection we need to start on a low dose and increase to the maximum tolerated dose, checking your potassium level and Blood Pressure (BP) at every stage.

Step	Name and dose	Blood test and BP approximately two weeks later. **Date and time**	BP approximately 4 weeks later (or provide a sheet of home BP results morning and evening for 7 days) DATE & TIME	Phone call to discuss results and BP results and agree about the dose increase **Date and time**
1				
2				
3				
4				

Medication 2: starting a SGLT-2 inhibitor ('Gliflozin') with proven renal protection

Name and dose of your SGLT-2 inhibitor

Canagliflozin, Dapagliflozin and Empagliflozin are diabetes medications that help to protect your kidneys and your heart. They work by blocking the reuptake of glucose by the kidney which causes glucose to be excreted in your urine, reducing your blood glucose and weight (in normal circumstances, all glucose is reabsorbed through the kidneys and used by the body).

These are once daily medications and no immediate dose increase is required. Normally your HbA1c blood test is checked 3-months after commencing.

Check if you are taking a 'statin'

Leaking protein from your kidneys is considered an early marker of cardiovascular disease. So check you are taking a 'statin' to ensure maximum protection. Atorvastatin 20mg once daily is the recommended statin and dose.

This may all seem quite extreme needing three additional medications on top of each other due to microparticles of protein leaking into your urine, but early treatment will significantly reduce your risk of further kidney and heart damage.

Consider them an insurance policy to protect you long term, alongside considering healthy daily habits related to smoking cessation, weight loss, improved quality sleep, reduced stress and moving more.

Any notes