Who is the mystery patient?

UNDER THE MASK

Ms. Radhika

With chronic kidney disease (eGFR < 45)

Sex and age	Female, 50 years old	
T2D	T2D for 5 years	
Relevant history	• Hypertension (controlled) • Dyslipidemia (controlled) • Non-smoker	
Recent exams	BP	128/80 mmHg
	BMI	30 kg/m^2
	A1C	6.9%
	eGFR	43 mL/min/1.73 m^2
	uACR	25 mg/mmol

Medications

Metformin 1000 mg BID
Glyclazide 160 mg BID
Sitagliptin 50 mg DIE
Perindopril 4 mg DIE
Simvastatin 20 mg DIE

Other relevant information

No additional information

- With obesity
- With CVD and controlled A1C
- Experiencing fatigue and shortness of breath on exertion
- **With chronic kidney disease (eGFR < 45)**
- With heart failure
- With CV risk factors and A1C > target values
- Independent patient aged 80 or older, with multiple comorbidities
- Newly diagnosed with T2D

Questions	Key Learnings
1. What do you think of the patient's eGFR (43 mL/min/1.73m2) and uACR (25 mg/mmol)? What therapeutic changes would you make based on these parameters?	• Importance of eGFR and uACR in relation to the albuminuria prevention/treatment strategy • Influence of eGFR on treatment regimen and guideline recommendations
2. How often do you perform kidney function testing (eGFR and uACR)? • - How would you rate her risk of developing kidney disease? • - When to refer the patient to a nephrologist.	• The Diabetes Canada guidelines recommend that screening for diabetes-related kidney disease (eGFR and uACR) in adults with diabetes be performed annually if the patient is stable and non-diabetic kidney disease or acute kidney disease are not suspected. • According to the KDIGO criteria, this patient is at very high risk of developing nephropathy.
3. Do her kidney function results preclude the use of an agent for cardiorenal protection?	• The cardiorenal protective effect is independent of kidney function
4. And if the patient's eGFR were to drop to 28 mL/min, what would you do with an SGLT2 inhibitor, if anything?	• Safety and effectiveness of SGLT2 inhibitors on low eGFR
5. Could we maintain a GLP-1 RA if the eGFR drops to 25 mL/min?	• Safety and effectiveness of GLP-1 RAs on low eGFR
6. What is the evidence to support the use of an SGLT2 inhibitor in this patient? Finerenone? What if the patient were non-albuminuric?	• Evidence for SGLT-2 inhibitors in CKD Patients
7. If the patient had CKD, but not T2D, would you still use an SGLT2 inhibitor?	• The efficacy of SGLT2 inhibitors in non-T2D patients with CKD

A1C: glycosylated hemoglobin; **BID:** twice daily; **BMI:** body mass index; **BP:** blood pressure; **CV:** cardiovascular; **DIE:** once daily; **eGFR:** estimatedglomerular filtration rate; **T2D:** type 2 diabetes; **uACR:** urine albumin-to-creatinine ratio.