

## Chronic Kidney Disease Case

Mrs. Jones is a 60 yo female with a 15 year history of type II diabetes. She presents to your office for the first time in transfer from another practice. She feels well and has no complaints.

<b>PMH</b>	Hypertension No past history of MI or known CAD Diabetes type II, complicated by peripheral neuropathy Has ongoing Podiatry and Ophtho Obesity, BMI 30 (Weight 186, Height 5'6") Depression Tobacco abuse – in the past – 40 pack years	<b>Medications</b>	Metformin 500 bid Glyburide 10 bid Enalapril 10 qd HCTZ 25 qd Zolof 100 qd Neurontin 600 qhs Lipitor 40 qhs ASA 81 qd
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**On physical exam:** VS – Afebrile 155 / 88 66 99% RA

Older than stated age, alert and oriented, normal affect  
RRR no murmurs, CTAB  
Abd soft, normal BS, no bruits  
Feet absent monofilament sensation & DP absent bilaterally  
No open wounds, bony deformities or sign of tinea

### Recent lab studies include:

Creatinine	1.7	same value on three occasions in last 6 months
Ha1c	8.5	
H/H	10.2 / 30	same value twice in last year
Vit D	25	
Phosphorus	4.6	
LDL	92	

**What stage CKD does this patient have?  
Please calculate her GFR.**

**What is the most likely cause of her CKD?**

**What other information or diagnostic tests would you hope to find in her past records to help confirm this diagnosis?**

**Which co-morbidities put her at greater risk for progression of her kidney disease?**

## **Medications in CKD**

You check a UA on your patient in the office and find that she has 1+ protein on the dip. Also her BP is elevated as you have noted. Is it safe to increase her ACE-I? If you do increase it, what monitoring should you perform and when?

2 months after increasing the Enalapril you find that her creatinine has increased to 2.1 and potassium is 4.6. Should you stop or decrease the ACE-I?

This creatinine of 2.1 is stable when checked in another 2 months and appears to be her new baseline. What other medications on her list would you change and why?

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## **Anemia in CKD**

You notice that she has a chronic anemia with H/H as listed above. What do you expect her MCV to be? What additional studies might you order?

Results of your tests include a low iron level and a low ferritin. Are there any other diagnostic tests you might order and why?

What treatment if any would you recommend and why? What benefits are there to treatment?

## **Vit D and Phosphorus Balance in CKD**

You notice that someone has checked Vitamin D and phosphorus levels on this patient. Why do you think this was done?

Are this patient's levels normal?

Are there any other tests related to phosphorus balance that are indicated in this patient with CKD 3?

You look more in her records and find a recent calcium level that is borderline low and an intact PTH of 75. Are there any treatments you would recommend to her at this time? If not now, when?

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## **Dietary Modification in CKD**

At the time of the patient's first visit to you, what dietary modifications would you recommend to her?

You further review her records and realize that she has an elevated phosphorus and intact PTH. You read a bit online and think perhaps she should be on a low phosphorus diet. What foods should she avoid?

You also wonder about a low potassium diet. What foods should she avoid that are high in potassium?

She thinks she has heard that people with renal failure should be on a low protein diet. Is this true? Should she stop eating meat?