

WORKSHEET FOR KIDNEY SESSION 1

ANSWERS

1. What are the five main functions of the kidney?

- Fluid balance
- Excretion of waste (electrolyte and acid-base balance)
- BP control
- Erythropoietin production (red blood cells)
- Vitamin D3 (healthy bones)

2. How many stages of kidney disease are there?

There are 5 stages but stage 3 is divided into stage 3a and 3b

3. What tests are needed to stage CKD?

Blood (U&E for serum creatinine) and urine (ACR for albumin:creatinine ratio)

4. Identify 4 major causes of chronic kidney disease

Diabetes, high blood pressure, glomerulonephritis, polycystic kidney disease

5. Case study 1

What stage of CKD does she have? Stage 3a

What is likely cause? Likely to be a mixture of uncontrolled diabetes and blood pressure

What would you say to her? It is important not to worry her, so give clear messages such as your kidneys are not working as well as they were; we will monitor your kidneys by asking you to give a blood test and a urine test; we will keep an eye on your blood pressure as this can help keep the kidneys healthy

How would you manage this patient? A formal clinic review every year for blood and urine test, but in the meantime monitor blood pressure (3-6 monthly) to ensure medication is controlling it.

6. Case study 2

What stage of CKD does he have? Stage 3b

What is likely cause? Likely to be uncontrolled diabetes (look up about HbA1c if you don't know about this), alongside uncontrolled blood pressure

What would you say to him? Unfortunately, this gentleman is likely to have progressive kidney disease (he has a lot of protein in the urine (ACR)), which might result in him needing dialysis in the next few years. There are various things he can do to slow down the progression, so our aim would be to have a serious conversation with him about this, as it has to be done in partnership with him.

How would you manage this patient? All your care is targeted around self-management and partnership working. He will need regular check-ups 3 monthly as a minimum, with the aim to:

- control his BP to 130/80 by asking him what BP medication he is taking (he might be prescribed tablets but he might not be taking them) and then control his BP following guidelines <https://www.nice.org.uk/guidance/NG136>

- talk with him about controlling his blood glucose, with possibly starting insulin as metformin is contraindicated in kidney problems, due to risk of acidosis.
- Check his eyes and feet and stress importance of foot care.

Lots of resources can be found here <https://www.diabetes.org.uk/professionals>

7. Case study 3

What should you do?

There are no right or wrong answers here, but the important thing is that decisions are shared between the patient, family and staff. Health care professionals have to sometimes be in the patients' shoes but at the same time try to understand the family's views.

8. Reflection

Think about the questions that older people with kidney disease might have during the COVID19 outbreak. Write down 4 questions and then look at the links on the slide I have given you to see if the questions can be answered.

The most common questions (April 2020) are

For people who have had a kidney transplant (so a very high-risk group)

- Do I need to come to hospital for my out-patient appointment?
- How will I get my tablets if I usually pick them up at the hospital?
- Does my partner need to self-isolate with me?

For people who are having dialysis in the hospital

- Should I use public transport to get to dialysis?
- Will my temperature be checked when I get there?
- Will I have dialysis at the same time as usual?

I hope you have enjoyed the session. If you are interested in learning about kidney care and dialysis then do look at these films that we have developed with patients

<https://www.youtube.com/watch?v=vH8gHVhTr0g>

<https://www.youtube.com/watch?v=0kboxhSGaW8>

Any questions do email me.

Best wishes

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