

# Case on chronic kidney disease and heart failure

Just read one part at the time and discuss the questions. We will gather you all for discussion between each part.

## Part 1

You work as a palliative consultant at a university hospital. You are called regarding Karin, who is a 65 year old woman. She is divorced, lives alone and has two adult children who live in another town. Karin has smoked during the major part of her life, on average 1,5 pack of cigarettes per day. She continues smoking in spite of repeated advices to stop. She was first on sick leave for a couple of years because of back pain, and after a short return to work the company went into bankruptcy and she became unemployed. Karin has a cottage where she really likes to spend most of the summer period. During winter she stays at her apartment in town.

Her primary care physician has treated Karin because of hypertension. Creatinine levels have been normal. Three weeks ago, she started to get ankle oedema, and dyspnea, especially during the nights. She was referred to the hospital because of the symptoms and a creatinin of 2.5 mg/dL (221 micromoles/L) and a mean eGFR of 18 ml/min was found. The blood pressure was high and on the EKG there was a LBBB which was new. Karin has never had any chest pains.

At the emergency department, NT-proBNP was 6400 pg/mL and troponin T was slightly elevated but with no dynamics. Her urea level was 15 and she was not acidotic or hyperkalemic. The oxygen saturation was 89%. A Chest X-ray showed pulmonary congestion and 1 cm pleural effusion bilaterally. Karin stayed at an inpatient ward and was shown to have heart failure with an ejection fraction of 30% combined with a slight right ventricular dysfunction. Karin was prescribed ACE-I, betablocker and diuretics. Her creatinin was stable during the time at the hospital. It was interpreted as a chronic kidney disease, with a rise in phosphate and PTH-levels and a renal anemia. Karin has NYHA class 2 and chronic kidney disease stage 4. Her home situation worries her since she does not find the strength to carry on with her daily activities as before.

- 1. What should/could be the primary goals of the treatment for Karin?**
- 2. Does Karin have any palliative needs right now? Will there be palliative needs in the close future? If so, which and how can we prepare for this?**
- 3. Which team members should be involved in the care?**

## Part 2

6 years have passed. Karin started dialysis 4 years ago. First she got peritoneal dialysis at home but she got too many peritonitis episodes and her urine production stopped entirely which made it necessary to start hemodialysis at the hospital 3 times a week and 4 hours each session. Dialysis works ok but she is a bit tired between treatment sessions. She has a restriction regarding fluid intake of 1.5 L/day. Her list of medications includes ACE-I, betablocker, calcium channel blocker, doxazosin, vitamin-D, phosphate binders, sodium bicarbonate and calcium polystyrene-sulphonate. Once a week she receives erythropoietin sc and iron iv during dialysis. Karin has spent a lot of time at the hospital because of infections arising because of her vascular access, a central dialysis catheter. It was not possible to operate an AV-fistula because her vessels in the arms were too atherosclerotic. Karin has pain in the legs after 50 m walking, which stops at rest. She also has pain during the night, as well as a sense of pins, needles and numbness. Sometimes she has to walk around in the apartment during night to make it stop. The dialysis physician has prescribed paracetamol for the pain but this is hardly enough. There is both an ischemic pain and polyneuropathy because of the uremia. It is not possible to make any endovascular intervention or bypass because the atherosclerosis is too wide spread.

Karin can spend few days in the cottage since it is far from the dialysis unit. She is also tired after dialysis, so she has not the energy needed to go there. Her children do not come to visit her very often – they have their work and family to take care about. A friend comes to visit her two times a week.

- 1. Does Karin have any palliative care needs now and how should we take care of them?**
- 2. What options are there treating Karin's pains?**
- 3. Which team members should we involve?**

### **Part 3**

Karin has now been on dialysis for 6 years. Her fatigue between dialysis treatment sessions has increased and she has to take bed rest for several hours when coming home. She is also dyspnoic, NYHA 3-4 and her physical activity is severely restricted. She cannot walk up the few stairs to the apartment. She has a lack of appetite and a BMI of 17. On non-dialysis days she listens to the radio and goes out on the balcony to smoke. In spite of dialysis, Karin has therapy resistant itching and nausea. She has sold the cottage and the car. The pain in the legs is more severe now. The dialysis physician has prescribed 1 tablet immediate-release Oxycodone when needed, maximum two times a day. He has said that otherwise there is a risk that she gets habituated to the pain killers. She has also received sleeping pills. Karin has been treated at the inpatient ward at the hospital five times the last 6 months because of different problems:

infections and impaired general condition as well as hypotension and tachycardia during dialysis. Karin is sad and anxious. Her friend does not come to visit her very often because Karin often denies company. The dialysis nurses have pressed the physician to speak with the patient. They think she has a poor quality of life and wonder what good dialysis does for her.

1. **The dialysis physician calls you to ask if there is something we could do for the patient. Is it time for a conversation?**
2. **Are there any palliative care needs and if so, how can we help Karin now?**
3. **Are there new team members to involve?**
4. **What shall we think regarding dialysis treatment and medications?**

#### **Part 4a**

Another year has passed. Karin is still on dialysis but only 3 hours two times a week. Her fatigue is even more severe and her muscle mass is highly reduced. She does not call her sons very much since she thinks she bothers them. Dialysis is hard to perform because of problems with the central dialysis catheter. The episodes of hypotension come more often, almost every dialysis session. The nurses find the situation very difficult and say to the physician that a decision has to be made to give palliative care and plan for stopping dialysis. The physician takes a deep breath and asks Karin if she has pondered her situation and if dialysis is really of any use to her, since it seems to hurt more than it benefits her. Could it be time to stop dialysis? Karin get completely perplex. But without dialysis I will die, Karin says with fear in her eyes.

1. **Could something have been done in a better way?**
2. **Is there something we have to do now?**
3. **Are there new or more severe palliative needs?**
4. **What would you as a palliative consultant say if the physician calls you now?**

#### **Part 4b**

Karin got another conversation with the physician and a son of hers participated on phone. Karin has pondered her situation and found out she wants to stop dialysis and get symptomatic care. The son suddenly asks: "So my mother does not need any more dialysis now? Will she get any better?"

1. **How should these questions be answered?**
2. **Is there something else we have to do now?**
3. **Where can/should Karin get palliative care?**

## **Reflection:**

### **What was good and what could have been done better during this trajectory? Case on chronic kidney disease and heart failure**

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