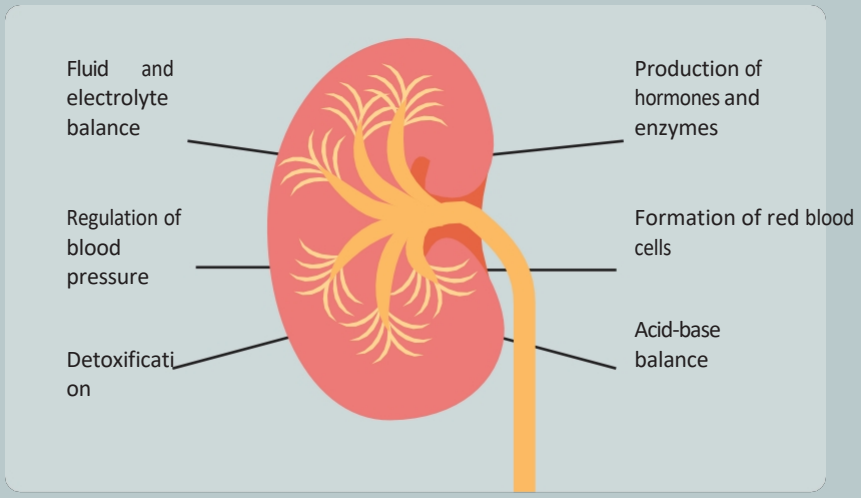
Chronic renal insufficiency

A typical disease of old age

Do you always know exactly what is behind your nursing clients' diagnoses and what exactly needs to be considered for a particular diagnosis? If not, you should read this article. Because today we are informing you about the topic of "renal insufficiency". This topic is particularly important in geriatric care because the kidney is a central organ and renal insufficiency is a serious illness that can lead to the need for dialysis and death.

The kidneys have a variety of tasks in the body

The main task of the kidneys is to filter and purify the blood. The bean-shaped organs remove excess water and toxic metabolic products from the bloodstream - both are excreted as urine. The kidneys are therefore vital for regulating the water and salt balance and for detoxifying the body.



Chronic renal insufficiency

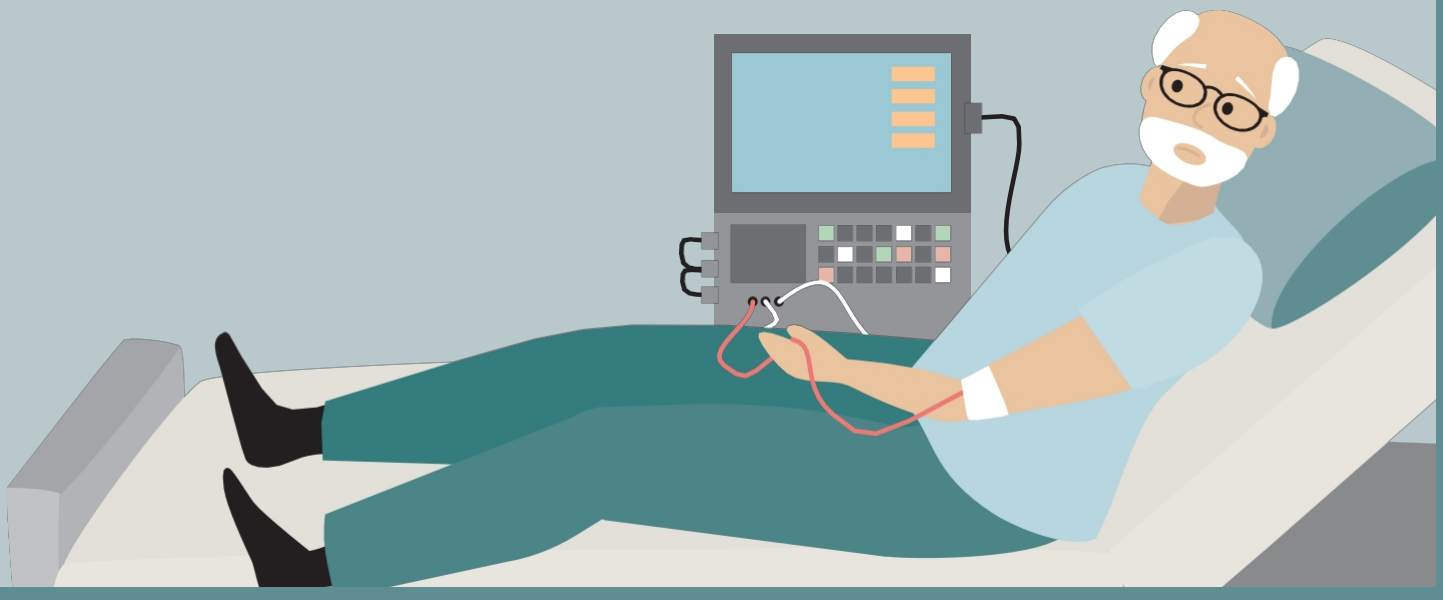
In the case of chronic renal insufficiency, kidney function deteriorates continuously over months or years. Almost every elderly person suffers from chronic renal insufficiency because their performance decreases with age. However, the main causes of chronic renal insufficiency are not only age, but also diabetes, high blood pressure and frequent use of painkillers.

Classification of chronic renal insufficiency into degrees of severity

The staging of renal insufficiency is based on the so-called glomerular filtration rate (GFR). This indicates how much fluid is filtered in the kidneys per minute. In a healthy person, the GFR is around 95 to 110 millilitres per minute. This means that at least 95 millilitres of blood are cleansed of waste products such as creatinine (a breakdown product of muscle metabolism) every minute. If the kidneys no longer work properly and filtration is reduced, toxic substances accumulate in the body and can have a harmful effect.

Overview: Stages of chronic renal failure

Stage	GFR	Notes
I	> 90 ml/minute	At this early stage, renal insufficiency is usually only discovered by chance. Protein is already being excreted at this stage. Those affected do not yet have any symptoms, but water retention in the tissue or discoloured urine may already occur. Treatment consists of monitoring. The aim is to prevent the renal insufficiency from deteriorating further.
II	60 - 89 ml/minute	At this stage, the creatinine level is still stable. There are hardly any symptoms. The aim is to protect the kidney from an increase in functional impairment.
III	30 - 59 ml/minute	Creatinine and urea in the blood now increase because the kidney's filter function is reduced. Symptoms such as high blood pressure, rapid fatigue and reduced performance occur. The progression of the disease is almost unstoppable. If the affected person takes medication that is normally excreted via the kidneys, the dose must be reduced in order to avoid side effects.
IV	15 - 29 ml/minute	The significantly reduced kidney function causes increasingly severe symptoms. Fatigue is accompanied by loss of appetite, nausea, vomiting, itching, bone and nerve pain as well as water retention (oedema), e.g. in the legs or face. At this stage, kidney-related anaemia is also common. A diet and stricter monitoring are now necessary.
V	< 15 ml/minute	This is known as terminal renal insufficiency (end-stage renal failure). Kidney function is now severely restricted or the kidneys fail completely, i.e. they can no longer cleanse the blood. Those affected require detoxification via dialysis or need a kidney transplant in order to survive.



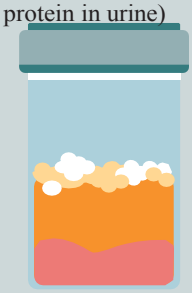
Symptoms

As you can see from the staging, chronic renal failure does not initially cause any discomfort. Some sufferers complain of uncharacteristic symptoms such as poor performance and tiredness. Another early sign of chronic renal insufficiency may be frequent urination, whereby the urine is very light-coloured and not very concentrated.

As the disease progresses, chronic renal insufficiency is often accompanied by the following symptoms:

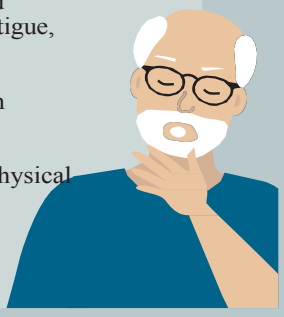
- High blood pressure

- Small amounts of urine
- Sometimes red coloured urine
- foaming urine during Urination (Note for protein in urine)



- Fluid accumulation (oedema) in the body, especially in the legs and eyelids

- Anaemia and associated fatigue, Weakness, concentration problems, decreasing physical resilience



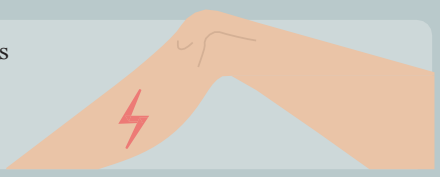
- Increased susceptibility to infections

- Bone pain / muscle pain

- Yellowish skin colour
- Itching and burning in the legs

- Nausea and vomiting and/or diarrhoea

- Calf cramps



The progression of chronic kidney failure gradually damages almost all organs and organ systems in the body - doctors refer to this as uraemic syndrome. It leads to pathological changes in the cardiovascular system, the haematopoietic system, the gastrointestinal tract, the nervous system, the endocrine system as well as the skin and bones. The more the kidneys lose function, the more serious the symptoms become. In the case of terminal kidney failure, symptoms such as

- massive breathlessness
- Irregular heartbeat
- Drowsiness
- Drowsiness
- Convulsions and coma

Article also available in several languages at
https://durchblick-pflege.de

How chronic renal insufficiency is treated

As soon as you notice the above symptoms in a care client, you should inform a care professional immediately. They will then contact the doctor. Treatment depends on the stage of the illness and must be prescribed by the doctor. The doctor often prescribes measures to eliminate the cause of the disease, treat concomitant illnesses and regularly check the kidney values.

When caring for a patient with renal insufficiency, you should bear the following things in mind:

Your care client should

Drink 2-3 litres per day (the nursing staff discuss the exact amount to be drunk with the doctor and document this in the nursing documentation).

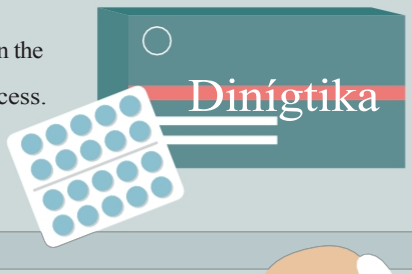
limit protein consumption.

Avoid painkillers, rheumatism medication and antibiotics if possible.

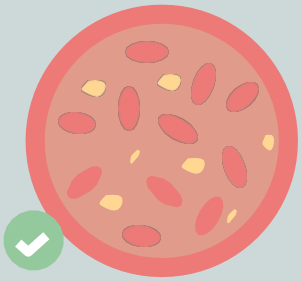
Do not smoke.

No diuretics in the

To take to excess.



keep blood lipids within the normal range.



In case of vomiting and diarrhoea, make sure you drink enough fluids.