Vivantes
Humboldt-Klinikum

Clinic for Urology

# Patient Information Radical Prostatectomy

Dear patient,

a biopsy has diagnosed you with prostate cancer.

Your urologist has certainly already answered many questions.
One therapy option is the surgical removal of the prostate (radical prostatectomy).

We would be happy to discuss the details of the operation with you and your relatives during our chief physician consulting hours.

The following explanations are provided to help you prepare for this interview. Please bring the completed attached questionnaires with you to the consultation.

Best regards,

Christian Klopf and Steffen Weikert,
Chief Physicians

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## Before surgery

Certain medications should be discontinued before your surgery.

- Blood thinning tablets, known as platelet aggregation inhibitors, must be discontinued:
  – Clopidogrel (Plavix, Iscover) 7 days before surgery
  – Ticlopidin (Tyklid) 10 days before surgery
  – Acetylsalicylic acid (Aspirin, ASS, Godamed, HerzASS, Aggrenox, etc.) should be discontinued 5 days before surgery. In the case of certain heart diseases (e.g. coronary stenting or heart attack), it may also be necessary to undergo surgery while continuing to take this medication. Please inquire during the admission consultation!

- New oral anticoagulants (NOAK): e.g. Xarelto, Pradaxa, etc. must be discontinued 48 hours before the operation, i.e. you may take these drugs two days before the operation in the morning and then you must abstain.

- Coumarin derivatives: Marcumar, Falithrom 14 days before the operation (the prothrombin time should be >50%) and conversion to "heparin injections". Please ask your family doctor first!

## Preadmission examinations

Please come to the central reception on the ground floor of the main building for your appointment (usually one week before the operation). You will first be admitted administratively. You will then be examined by the urological admission physician and a blood sample will be taken. In preparation for the operation, you will also speak with the anesthetist. The entire process of admission and clarification will take about 3 hours.

## Operation

The day before your operation, please call 030 130 12 2364 to find out the time of your admission.
You are allowed to eat until midnight the day before the operation.
Drinking water is allowed until 6 a.m.
The operation takes about 1.5-2.5 hours.
Right before the operation, the surgical area will be shaved. You should not perform this shave yourself. The operation is performed under general anesthesia. After the operation, postoperative pain is eliminated by means of medication. Various methods are available to eliminate pain. The anesthetist will discuss the pain elimination options with you in advance.

The operation is carried out either in the classical open technique via an abdominal incision or as a minimally invasive robot-assisted operation (also known as da Vinci surgery). The surgical technique which is suitable for you depends on your findings. You and your surgeon will discuss the surgical technique in detail. **Open (or retropubic) surgery** is performed through a small abdominal incision (10cm) from the pubic bone to slightly below the navel. We use a microsurgical procedure during the operation. In this procedure, the surgical area is greatly enlarged with the help of magnifying glasses to enable particularly gentle preparation.
**Robot-assisted surgery** is performed via 6 accesses to the abdominal cavity that are only a few millimeters in size. The robot precisely transfers the surgeon's hand movements to the instruments inside the body. In addition, a 3D representation at high magnification facilitates the identification of important nerve fibers and vessels.

**Nerve retention:** The neurovascular bundle, which is responsible for erectile function (potency), runs close to the prostate. With certain initial findings, the nerve-sparing surgical method is possible without having to take major risks in tumor surgery. It is therefore important that you complete the questionnaires (IIEF-5, IPSS) and bring them with you to the preliminary consultation in order to make an initial assessment before the operation. Higher success rates are achieved if patients receive additional medication (Viagra, Cialis, or Levitra) after the operation or temporarily use a vacuum pump to induce erections at an early stage.
Despite this therapy, however, erectile tissue atrophy and penile shortening may occasionally occur.
If you still wish to have children, there is the option of preserving the sperm (freezing the semen) beforehand.

**Frozen section analysis:** In the case of potency-preserving surgery, it may be advisable to carry out a histological examination during the procedure. We will clarify in a preliminary discussion whether a frozen section analysis is recommended in your situation.

**Blood loss:** The amount of blood loss during surgery is usually about 300 ml. Blood donation is not necessary before the operation. Only less than 1% of our patients require the administration of blood transfusions.

**Lymph node removal:** As a result of the PSA test, tumor growth is rarely so advanced that the lymph nodes in the pelvis are affected. Removal of the lymph nodes is therefore not necessary with certain initial findings (PSA <10 ng/ml, Gleason 3+3).

## After the operation

To better control your circulation situation, you are monitored for about one hour in the recovery room.
The best time for your relatives to visit you is usually after 5 p.m. If you give us your relatives' mobile phone number before the operation, we can inform them about the operation right after it has been completed.
In the evening you can drink again and, if you have an appetite, you can also have a snack (soup/yogurt). If you have problems with bowel movements during the first few days, contact the nursing staff. You will then be given a light laxative.
You can get up the day after the operation at the latest. Of course, you will have help at first. Rapid mobilization promotes healing. You will therefore be encouraged to move around the ward as often as possible, and you will also be supported by physiotherapists. Physical activity also promotes normal intestinal activity and timely laxation after the operation.
The skin is closed with a self-dissolving suture so that the stitches do not have to be removed.
Starting from the third day after the operation, wound dressing will no longer be necessary and you will be allowed to take a shower. You are not allowed to take a bath for 3 weeks after the operation.

## Urethral suture and catheter

During the operation, the urethra is connected to the bladder by sutures. We use a special suturing technique that allows the suture to heal quickly and the catheter to be removed as early as possible. Nevertheless, the suture must be relieved by the catheter for 7 days after the operation. In addition, a wound drainage device is inserted during open surgery. The wound drainage device is removed on the first day if the flow rate is less than 50 ml/24 h. As a rule, you will remain in the hospital for 3 nights after the operation.
Urine is removed by means of a leg bag.
During the first days after the operation, it is completely normal for blood and wound secretion to be discharged in addition to the bladder catheter and for urine to still be bloody. Since your bladder initially perceives the catheter as a foreign body, you will regularly receive painkillers.
One week after the operation you will come back to Urological Ward 06 for catheter removal. Your urine should be clear by then. If you still have bloody urine, this appointment must be postponed.

## Follow-up treatment

During the inpatient stay, an outpatient or inpatient follow-up treatment (rehabilitation) is registered via our Social Services department.

Our partner clinics are:

Müritz Clinic
http://www.mueritz-klinik.de

Vivantes Rehabilitation in Berlin-Friedenau
https://reha.vivantes.de/

ZAR Berlin Mitte
http://www.zar-berlin.de/

Our colleagues from Social Services will be happy to advise you on the various services offered by the rehabilitation clinics.
The final decision on the follow-up treatment will be made by your insurance company (pension insurance), but we will support you according to your wishes. Of course, follow-up treatment is not absolutely necessary. However, it will help you recover all bodily functions.

## Discharge

Patients are usually discharged on the 3rd day after the operation. You can leave the clinic around 11 a.m. on the day of discharge. If possible, you should be picked up. Please do not drive your own car. We do not recommend driving a car independently until around the 7th day after the operation, when you no longer need painkillers.

Due to the operation, you will experience a painful reaction delay during braking at least until this point in time. When you are discharged, you will receive a preliminary doctor's letter. The prostate removed during the procedure is subject to a histological examination at the Institute of Pathology. We will receive the final result after approx. 14 days.
Your urologist will receive the report and discuss it with you.
You will receive the final doctor's letter with the histological findings and recommendations for follow-up care by mail.

## After being discharged

After being discharged, you should consult your urologist before starting the follow-up treatment.
The urologist will check the wound again and prescribe the necessary medication/templates. We recommend an injection under the skin for blood thinning (Clexane 0.4) for the next 4 weeks starting the day after the operation. This therapy is intended to prevent the occurrence of thrombosis or embolism. You will be shown how to inject during your stay at the hospital. The injection should be performed above the wound (upper abdomen or upper arm). Prior disinfection is then no longer necessary at home. When you are discharged, some syringes will be given to you. However, you will then need a prescription for 20 syringes from your family doctor or urologist.

Many patients initially experience **urinary incontinence** after the catheter is removed. However, patients who need more than one safety template per day a few weeks after the operation are out of the ordinary. Most patients regain full control of urination and continence during the first weeks after surgery. Only in exceptional cases can this take up to several months. Initially, there may also be an increased urge to urinate, but your urologist may be able to treat this with medication.

The connection between the urethra and the bladder (anastomosis) is created with sutures that dissolve late. These sutures are partially located inside the bladder. Thus, in rare cases, suture residues can still be eliminated with the urine months later. This is harmless and is in line with the normal healing process.

## What other rules of conduct should you observe?

After the operation, you should avoid heavy lifting and carrying (> 5 kg) for 3 weeks.
All sporting activities, including cycling, are permitted again after three weeks as long as there is no discomfort and the wound is unobtrusive.
Further follow-up care or treatment will depend on the findings of the histopathological examination of the prostate.

- The prostate removed during the procedure is subjected to a histological examination. We will receive the final result after approx. 14 days. Your urologist will receive the result at the same time and can discuss the findings with you.

- You will receive a final doctor's letter with all important findings and recommendations for further treatment and follow-up care.

- Approximately 8 weeks after surgery, your urologist will perform the first check of the PSA level (PSA = prostate specific antigen); at that time the level should be below 0.1 ng/ml or below the detection limit.

- Checks of the PSA level by your urologist (initially every 3 months) are sufficient in most cases. The PSA level should be below the detection limit of the "zero range" during your entire life.

- As a rule, no further treatment of prostate cancer is necessary after surgery.
  Additional radiation therapy may be necessary if there is a high risk of incomplete removal of the prostate cancer.

- Incomplete removal of the prostate cancer can lead to a recurrence of the disease.

- If the pathologist detects a tumor stage of "pT3a R1" or "pT3b R1," the risk is particularly high. This means that the cancer cells protrude into the surface of the surgical specimen (R1) and have also broken through the prostate capsule ("pT3a") or reached the seminal vesicles (stage "pT3b").

- In patients with a high risk, additional irradiation of the surgical site within 4 months of surgery may be considered. This is referred to as post-radiation or adjuvant radiotherapy – provided that the PSA level has previously reached zero.

- About half of high-risk patients do not develop the disease again even without radiotherapy.

- It has not been clarified whether radiotherapy should be carried out immediately or whether it is possible to wait for an increase in the PSA level above 0.2 ng/ml. By waiting, about half of those affected can be spared radiotherapy.

- If the additional radiotherapy is only performed when the PSA level increases (also called "biochemical relapse"), it is referred to as "salvage radiotherapy."

- If you have an increased risk, your urologist will discuss the advantages and disadvantages of follow-up radiotherapy with you.

Further therapy with medication may only be necessary if there are indications of prostate cancer spreading to lymph nodes or other organs.

- If the PSA level does not drop to the zero range after surgery, but instead rises again, this may indicate that the prostate cancer is spreading.
- Hormone therapy may be necessary in this situation. Radiotherapy is also advisable in many cases.
- To better plan your therapy, your urologist may arrange further examinations.
- He or she will inform you about your individual situation and explain your therapy options to you.

**You can also contact us if you have any questions!**

Please tick!

**1. How would you rate your confidence in getting and maintaining an erection?**

| (1) very low or low | (2) medium-moderate | (3) large | (4) very large | (5) non-existent |
|---|---|---|---|---|

**2. If you had erections during sexual stimulation, how often were your erections hard enough for penetration?**

| (0) No sexual stimulation | (1) Almost never or never | (2) Rarely (much less than half the time) | (3) Sometimes (about half the time) | (4) Most of the time (more than half the time) | (5) Almost always or always |
|---|---|---|---|---|---|

**3. How many times during sexual intercourse have you been able to maintain your erection after penetrating your partner?**

| (0) Sexual intercourse not attempted | (1) Almost never or never | (2) Rarely (much less than half the time) | (3) Sometimes (about half the time) | (4) Most of the time (more than half the time) | (5) Almost always or always |
|---|---|---|---|---|---|

**4. How difficult was it to maintain your erection during sexual intercourse until the end of sexual intercourse?**

| (0) Sexual intercourse not attempted | (1) Extremely difficult | (2) Very difficult | (3) Difficult | (4) A bit difficult | (5) Not difficult |
|---|---|---|---|---|---|

**5. When you tried to have sexual intercourse, how often was it satisfying for you?**

| (0) Sexual intercourse not attempted | (1) Almost never or never | (2) Rarely (much less than half the time) | (3) Sometimes (about half the time) | (4) Most of the time (more than half the time) | (5) Almost always or always |
|---|---|---|---|---|---|

Score:

If you scored 21 points or less, you are showing signs of erectile dysfunction.
Please consult your doctor.

## Micturition

## IPSS Questionnaire

Please tick! The details refer to the last 4 weeks.

**1. How often have you felt that your bladder was not completely empty after urinating?**

| (0) never | (1) less than in one in five cases | (2) less frequently than in half of all cases | (3) approximately half of all cases | (4) in more than half of all cases | (5) almost allways |
|---|---|---|---|---|---|

**2. How often have you had to urinate a second time within 2 hours?**

| (0) | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|

**3. How often have you had to stop urinating and start again several times?**

| (0) | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|

**4. How often have you had trouble delaying urination?**

| (0) | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|

**5. How often have you had a weak stream of urine?**

| (0) | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|

**6. How often have you had to push or exert yourself to start urinating?**

| (0) | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|

**7. On average, how often have you had to get up at night to urinate?**

| (0) never | (1) once | (2) twice | (3) three times | (4) four times | (5) ≥ five times |
|---|---|---|---|---|---|

Total IPSS score

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## Impairment of quality of life due to urinary tract symptoms

**How would you feel if your current urination symptoms didn't change in your future life?**

| (0) excellent | (1) satisfied, mostly mixed | (2) partly satisfied | (3) mostly unhappy, very bad | (4) satisfied | (5) satisfied, partly unsatisfied | (6) unsatisfied |
|---|---|---|---|---|---|---|

Quality of Life Index L:

Please tick!

**1. How often do you experience involuntary urine loss?**

- (0) Never
- (1) Once a week or more rarely
- (2) Two to three times a week
- (3) Once a day
- (4) Several times a day
- (5) Constantly

**2. What is the urine loss?**

- (0) No urine loss
- (2) A small amount
- (4) A medium amount
- (6) A large amount

**3. How severely is your life affected by the loss of urine?**

0 1 2 3 4 5 6 7 8 9 10

not at all severely

ICIQ total score (1+2+3):

| | |
|---|---|
| Maximum score: | 21 |
| No incontinence | 0 |
| Light incontinence | 1–5 |
| Moderate incontinence | 6–10 |
| Severe incontinence | >10 |

# Pelvic floor strengthening for men

The pelvic floor is a muscle plate that closes our pelvis at the bottom and runs from the coccyx to the pubic bone between the right and left ischial tuberosities. In men, it contains two openings: the urethra and the anus. These muscles have the important function of supporting the pelvic organs. They are particularly stressed during sneezing, coughing, laughing, jumping, lifting, and physically heavy work as well as through the prolonged wearing of a bladder catheter after an operation.

If the pelvic floor is weak after surgery or is not rehabilitated, the patient may have difficulty holding his urine.

If you are now exercising your pelvic floor, do so by tightening the muscles as well as the urethra and anus. Imagine you have to go to the toilet, but it's occupied ...

Here are some exercises – first try to tense and loosen the pelvic floor in a fast rhythm.

But you can also exercise the pelvic floor in other ways!
**For more information, please turn the page.**

## Trampolining

Imagine the pelvic floor were spanned like a trampoline in the pelvis.
Now give an imaginary jumper a bounce upwards with your "trampoline,"
but let him slide downwards slowly.
Try to repeat the exercise 10 times, throwing the "jumper" a bit higher each time.

## Flashlight

There are flashlights whose light beam can be adjusted to appear either narrow or wide. What if the pelvic floor also had this feature?

| | | |
|---|---|---|
| Narrow | = | pelvic floor tension – perhaps the light beam can even be completely blocked? |
| Wide | = | pelvic floor relaxation |

## Elevator

Elevators can stop on several floors. Now imagine your pelvic floor as an elevator:

| | | |
|---|---|---|
| 1st floor | = | Loose, no tension |
| 5th floor, right at the top | = | Maximum tension |

Try to find floors 2, 3, 4 in between.
Now you can play with your "elevator" any way you like.

| | | |
|---|---|---|
| Strengthening | = | Go to the 5th floor |
| Enhancement | = | Stay on the 5th floor |

Count the seconds. Maybe you can count to 15, 20, 30?
10 times in a row would be fantastic.

All these exercises can be done while sitting, lying, or standing.
It's important that you remember to do it often. While telephoning, cooking, shopping, at the bus stop, at work... Tension must be deliberately applied during activities that exert pressure on the pelvic floor, especially when the pelvic floor is still weak. So first tense, then laugh, lift, etc.
Don't give up too early. Muscles can be trained, including your pelvic floor.
You only have to "stick with it." A strong pelvic floor is very important for every man (no matter what age) ...

## GOOD LUCK!

# For your notes

## Your contact

**Prof. Dr. med.**
**Steffen Weikert**
Chief physician

**Dr. med.**
**Christian Klopf**
Chief physician

## Registration for consultations

Online: www.vivantes.de/huk/urologie

Tel. +49 30 130 12 1290 and 1291


## How do I get to the Vivantes Humboldt Hospital?

**U8** Reinickendorf City Hall, 15 minutes walking distance
**Bus 220** from Reinickendorf City Hall (exit at Reinickendorf Tax Office) until Humboldt Hospital
**Bus 124** from Alt-Tegel to Gorkistraße/ Am Nordgraben, 5 minutes walking distance

Parking spaces (fee required) are available in front of the clinic.

**Vivantes Humboldt Hospital**
Clinic for Urology
Academic teaching hospital of Charité
– University Medicine, Berlin
Am Nordgraben 2
13509 Berlin

**www.vivantes.de/huk/urologie**

**Online booking for appointments: termin.vivantes.de**