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Azienda Sanitaria Universitaria Giuliano Isontina
REGIONE AUTONOMA FRIULI VENEZIA GIULIA

INFORMATION FOR PATIENTS AFFECTED BY MALIGNANT BREAST NEOPLASM AND SCHEDULED FOR SURGERY

Azienda Sanitaria Universitaria Giuliano Isontina

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Dear Madam,

This booklet has been written with the aim of providing you with some information concerning the diagnostic and therapeutic pathway for your malignant breast neoplasm surgery.

This information does not replace direct contact with the surgeon. For this reason, do not hesitate to express any doubts and requests for clarification.

PREPARATION FOR THE SURGICAL OPERATION

During one or more medical visits, the surgeon will provide you with all the information regarding the clinical pathway and will illustrate the instrumental investigations which are necessary in order to complete the diagnosis: in addition to previous diagnostic investigations, in some cases you will undergo a BREAST MAGNETIC RESONANCE IMAGING AND/OR BREAST ULTRASOUND.

The surgeon will also explain to you that in some cases the planning of the surgery requires the PRECISE LOCASATION OF A NON-PALPABLE BREAST LESION. In fact, it is sometimes necessary to define the glandular area of the neoplasm: this is done by injecting a dye (charcoal) under ultrasound or mammography guidance (stereotaxis). This procedure defined as POSITIONING OF A REPERE leaves a trace on the skin that will allow the surgeon to locate the lesion in a precise manner. Alternatively, the localization of the breast lesion can be performed at the Nuclear Medicine Department: in this case the method is called ROLL and involves the injection of a radioactive tracer under ultrasound guidance. In some cases, a radiological check of the removed glandular portion may be performed (mammography of the removed piece).

The Surgeon will then complete your medical record in order to assess your general state of health and will inform you about the need to perform some tests in preparation for surgery. In fact, you will have to undergo complete blood tests, electrocardiograms, chest X-rays and a visit with the anaesthetist. In some cases, it may also be necessary to carry out additional evaluations (for example, cardiologist visit).

In light of the results obtained from the clinical evaluation and pre-operative visits, the Surgeon will discuss your case with a multidisciplinary team and will propose the necessary surgery (usually under general anaesthesia). The Surgeon will explain to you how the surgery will be performed and the possible complications related to it. During this interview, you will be invited to ask all the questions so as you fully understand the situation. At the end of the visit, you will receive the consent form to sign and give to the surgeon upon admission to the hospital.

From the first visit and throughout the whole pathway, the Breast Care Nurse will provide you with all the information you need in order to prepare for the surgery and will follow you in the postoperative period.
If you feel the need for psychological support, a dedicated professional is available at the Clinical Psychology service and can be contacted by your Surgeon.

DIFFERENT TYPES OF SURGICAL OPERATION

There are different types of surgery for the treatment of a malignant breast disease and the surgeon will explain which procedure is recommended in your case. The choice is determined by the diameter of the neoplasm and the relationship between breast volume and lesion volume.

In particular, it is possible to perform surgery in order to remove the part of the mammary gland affected by the neoplasm (**QUADRANTECTOMY**) and operations that involve the removal of the entire breast (**MASTECTOMY**). The choice between a conservative and a demolitive surgery does not indicate the severity of the tumour or the overall prognosis, but it depends on the extent of the disease within the mammary gland. Furthermore, the final choice about the type of surgery to be performed will be shared with you, after adequate and complete information regarding the potential benefits and short and long-term complications of each technique.

These surgeries are performed under general anaesthesia, even if it is possible to perform quadrantectomy and/or biopsy of the sentinel lymph node under local anaesthesia and sedation, in case of particular contraindications and in some selected cases or at the express request of the patient.

The **QUADRANTECTOMY** surgery allows the preservation of the remaining mammary quadrants and makes it mandatory to perform **post-operative radiotherapy**, which will be performed after discharge and after the oncological consultation at the Radiotherapy Service.

In some cases, **intra-operative radiotherapy** (IORT) may be performed, i.e. the administration of a portion (boost) of radiation at the site of the quadrantectomy during surgery. In this case, the radiotherapy treatment will be completed with some postoperative external radiotherapy sessions.

In some selected cases it is possible to administer the total dose of radiation necessary for the treatment of the disease (IORT Exclusive Intraoperative Radiotherapy) during the operation in order to avoid the subsequent use of external radiotherapy.

In cases where breast preservation is not possible, given the size and location of the lesion and considering the volume of the breast, the surgeon will propose the **MASTECTOMY** surgery, which involves the removal of the entire mammary gland and the nipple-areolar complex. Today this intervention can be carried out with the **SKIN-SPARING** technique which allows to preserve a large part of the skin. In very selected cases, the nipple-areolar complex can also be preserved (**NIPPLE SPARING**).

In cases where the use of a mastectomy is necessary, during a joint specialist consultation with the General Surgeon and the Plastic Surgeon, you will be offered the possibility of a **BREAST RECONSTRUCTION**. In particular, it is possible to undergo breast reconstruction immediately, during the mastectomy surgery, but it is sometimes preferable to carry out this operation later, after having completed the treatment of the disease and any chemotherapy and/or radiotherapy.

There are **several breast reconstruction options** and the Plastic Surgeon will explain to you that it is possible to place prostheses or expanders in place of the removed breast and to replace them later with definitive prostheses or to choose to reconstruct the breast with portions of tissue taken from different

anatomical sites (autologous flaps). The Plastic Surgeon will explain to you which surgery will be most suitable for your case and will help you choose the type of reconstruction to undergo. For this purpose, you will receive an information notice drafted by the Plastic Surgery team.

In addition to the conservative and a demolitive breast surgery, the treatment of breast neoplastic pathology includes the assessment of the state of the axillary lymph nodes. The neoplastic cells tend to enter the lymphatic ducts whose preferential drainage site is represented by the axillary lymph nodes. In most cases, where preoperative examinations do not demonstrate the presence of axillary lymph node metastases, it is indicated to perform **THE SENTINELLA LYMPH NODE BIOPSY**. This is the first lymph node that receives lymph from the breast area affected by the neoplasm and is the first to possibly be affected by cancer cells. If this lymph node is involved in an important way, there is the possibility of involvement of the other axillary lymph nodes, while in case of negativity or the presence of limited involvement, this occurrence is completely exceptional. The sentinel lymph node is identified with an examination called **LYMPHOSCINTIGRAPHY** which consists of the administration of a weakly radioactive tracer by means of an injection performed 24 hours before surgery at the level of the neoplasm. This examination is usually performed at 1 pm the day before the surgery at the Nuclear Medicine Department.

The objective of this examination is to identify the sentinel lymph node(s) that are identified in the operating room with a particular probe that detects the radioactive substance by emitting a sound signal. This will allow the removal of the lymph node through a separate incision at the axillary level or through the same incision used to perform the surgery on the mammary gland.
The lymph node can be analysed during the same surgery with a method called "**TOUCH IMPRINT**" or with the molecular method **OSNA** which allow to highlight the presence of neoplastic cells in the lymph node. In the event of a positive outcome, the procedure is carried out during the same surgery session or after the possible removal of the axillary lymph nodes (**AXILLAR DISSECTION**). In case of negativity, it is still mandatory to wait for the confirmation provided by the definitive histological examination available after about twenty days.

In some cases it is possible to have a positive cytological result of the axillary lymph nodes before the surgery: in this case the sentinel lymph node biopsy is

contraindicated and axillary dissection will be compulsorily performed.

THE PREOPERATIVE PHASE

For the execution of the preoperative examinations, you will be sent to the Surgery Preparation Outpatient Clinic: the Breast Care Nurse will communicate the schedule for check-ups (blood tests, chest X-ray, electrocardiogram, any specialist and anaesthetic visits) and for any diagnostic investigations (Magnetic Resonance, Ultrasound, positioning of the landmark during Ultrasound or Mammography), which will be performed on an outpatient basis.

At the end of the preparation you will be contacted by the Breast Care Nurse and you will be notified of the date of the surgery.

THE DAY BEFORE THE SURGERY

Hospitalization will generally take place the day before the surgery. For operations that do not involve breast reconstruction, you will be hospitalized at the Surgical Clinic on the 15th floor. For operations involving breast reconstruction, you will be hospitalized at the Plastic Surgery Department on the 9th floor.
The day before the intervention, you will arrive at the hospital for admission after 2 pm and you will carry out the preoperative surgical assessment and any subsequent blood tests.

If you need a sentinel lymph node biopsy, you will arrive at the Nuclear Medicine Service at 1 pm, before hospital admission, and you will undergo a lymphoscintigraphy for the identification of the sentinel lymph node.

In case of hospitalization on the day of the operation, you have to reach the hospital at 7 am on an empty stomach. We ask you to provide for the hair removal of the armpit to be operated, possibly with cream, a few days before admission and to take a shower the day before the surgery.

THE DAY OF THE SURGERY

You will have to observe an absolute fast (including liquids) from midnight of the previous day and you will have to abstain completely from smoking. Approximately 30 minutes before being taken to the operating room, you will be given a sedative drug with a pre-anaesthesia function.

Before the surgery, the anaesthetist could propose the execution of a nerve block made by infiltrating the nerve structures that are responsible for pain in the breast with local anaesthetic. This procedure is short and performed under ultrasound guidance before entering the operating room and will allow you to have better analgesic coverage in the postoperative period.

After the surgery, you will be taken to the Recovery Room, where you will spend the first hours of the postoperative period under careful clinical monitoring. The dressing will be covered with a modestly compressive and/or modelling bandage and there may be one or more drainage tubes that have the function of sucking the secretions formed in the surgery site. In the afternoon you will be taken back to the ward. During the first few hours you will be given painkillers and some infusions. Nursing staff will check your blood pressure, heart rate and the condition of the dressing and drainage tubes and, in the evening you will be able to get out of bed. After a few hours after the surgery you can drink water, light tea or chamomile and have a light dinner.

THE POSTOPERATIVE PERIOD

Medical examinations, dressings, blood checks will be performed and the amount of liquid present in the drains will be evaluated. The fluids on a drip will be suspended, you will be able to get up on your own and eat as usual. Pain relief therapy will be administered orally.
The date of discharge will be decided on the basis of your general conditions and clinical situation.

HOSPITAL STAY

If you have undergone demolition surgery and/or complete axillary dissection, the drains will be kept in place for a few days and the amount

of fluid drained will be monitored daily. At first the liquid will have a serum-haematic appearance, then it will become clearer day by day and its quantity will gradually decrease until it becomes negligible and allows the drainage to be removed.

DISCHARGE

You will be discharged after your general clinical status has been assessed. For conservative surgery (quadrantectomy with sentinel lymph node biopsy), discharge usually takes place the day after surgery, in the early afternoon. The drainage is not always removed before discharge and in the event that you are discharged with the drainage you will receive the information necessary for its management at home and you will be notified of the dates for the check-ups. Drainage is usually checked during daily visits.

For demolition surgeries with axillary dissection and in case of breast reconstruction, hospitalization will be longer (5-7 days) and the length of stay will be agreed in collaboration with the Plastic Surgery team.

In case of **AXILLAR DISSECTION** you will perform a **PHYSIATRIC VISIT** during which some exercises to be practiced as rehabilitation will be illustrated and you will be given a brochure containing the description of the recommended exercises and some general information. This visit and any subsequent rehabilitation treatment will be performed at the Rehabilitation Department in the Maggiore Hospital.

Upon discharge you will receive a letter for your General Practitioner, the form for exemption from the co-payment (ticket 048) which will allow you not to pay for the services related to your pathology, including a prosthesis to use in the bra if you underwent a mastectomy without immediate reconstruction. You will also be given some information about the precautions to take at home and you will be given the analgesics that you can use in the first days after discharge.

You will also be notified of the dates of the follow-up surgical visit and the appointments for dressings. The histological examination report will be communicated to you as soon as it is available. The resumption of work will be assessed on a case-by-case basis. You can ask for a copy of the medical record at the CUP counters and the certificate of hospitalization for the employer at the acceptance office.

RETURNING HOME

After surgery, it is normal to feel some sensations in the surgical wound. A feeling of swelling may be due to a small collection which is usually reabsorbed within two to three weeks and a feeling of tension may require the assumption of the analgesic prescribed at the time of discharge. Very intense pain and/or fever are rare: in this case a medical re-evaluation by the surgeon is necessary.
It is advisable to wear a non-wired bra or a supportive sports bra during the day. There must be no particular restrictions on the use of the arm: you can carry out your daily activities but you will have to refrain from the heaviest efforts and driving for about fifteen days.
In most cases, stitch removal will not be necessary, as the wound is usually sutured intradermally with resorbable suture. The surgical wound should not be wet for the first 5-7 days; you will be able to take a shower one week after the operation.
We do not recommend hair removal and the use of deodorants for at least 4 weeks after surgery.
Sometimes, painful fibrous cords may form between the armpit and the arm that show up when opening the arm. In this case it is however advisable to contact the Surgeon who will organize physiotherapy sessions with the Physiatrist who will implement detachment and manipulation manoeuvres.
Especially after axillary dissection and rarely after sentinel lymph node biopsy, you may feel tingling or paraesthesia (sensation of reduced skin sensitivity) in correspondence with the skin of the arm. They are due to the trauma of small sensory nerves and generally disappear as soon as the nerve fibres regenerate in a time ranging from a few weeks to a few months. In any case, these disorders will not interfere with daily activity.

MANAGEMENT OF DRAINAGE AT HOME

The drainage is a plastic device provided with holes at one end and it is applied during the operation. It is fixed to the skin with a suture and is connected to a closed suction system that does not allow contamination. The sucked liquid collects in the drain bellows which is emptied every 24 hours to calculate the total amount. Usually after a quadrantectomy and sentinel lymph node biopsy the quantity is 0-10 cc and for this reason the drainage is removed the day after the surgery. Otherwise it will remain in place and you will be invited to come daily to empty it and check it. You will be able to keep the drainage under your clothes and there is no

danger that it will come off accidentally because it is fixed with a stitch.

ASSESSMENT VISIT

During the follow-up surgical visits, the wound will be checked and the dressing will be changed. If you have been discharged with a drainage, it will be emptied and removed when the amount of drained fluid has reduced.

A few weeks after the surgery, as soon as the histological examination report is available, you will be contacted by phone and a visit will be scheduled. After an interdisciplinary re-evaluation of the case, the results of the definitive histological examination will be communicated and the next therapeutic procedure will be planned.

In some cases of sentinel lymph node positivity, any axillary dissection surgery will be scheduled, if it is necessary to complete the treatment of the armpit according to the multidisciplinary team.

A visit will be scheduled with the oncologist who will arrange the subsequent adjuvant therapies, radiotherapy and periodic follow-up checks to which you will have to undergo.

POSTOPERATIVE THERAPIES

The need for any postoperative medical treatment will be considered during the visit with the oncologist. Each patient requires a specific evaluation: in some cases it is sufficient to perform only clinical checks, in other cases it is necessary to perform hormone therapy based on drugs taken by mouth and/or chemotherapy administered intravenously on an outpatient basis.

The Oncologist will explain the reasons for the therapeutic choices and will talk to you about the methods of carrying out the therapies recommended in your case.

Radiotherapy is performed for all patients undergoing quadrantectomy, but may also be necessary in other cases based on the evaluation of the histological examination by the oncologist who will also schedule the check-ups following the conclusion of the therapeutic pathway.

Drafted by CREAUS and based on the information provided by the SSD Breast Unit

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