



SERVIZIO SANITARIO REGIONALE
EMILIA-ROMAGNA
Azienda Ospedaliera - Universitaria di Ferrara
Azienda Unità Sanitaria Locale di Ferrara



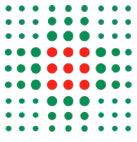
Università
degli Studi
di Ferrara

Diagnostic Therapeutic Assistance Path - BREAST PDTA -

Centro di Senologia di Ferrara



THE POST-OPERATIVE REHABILITATION PHASE



Dear Madam,

this brochure aims is to provide useful information to women treated by the Senology Centre in Ferrara.

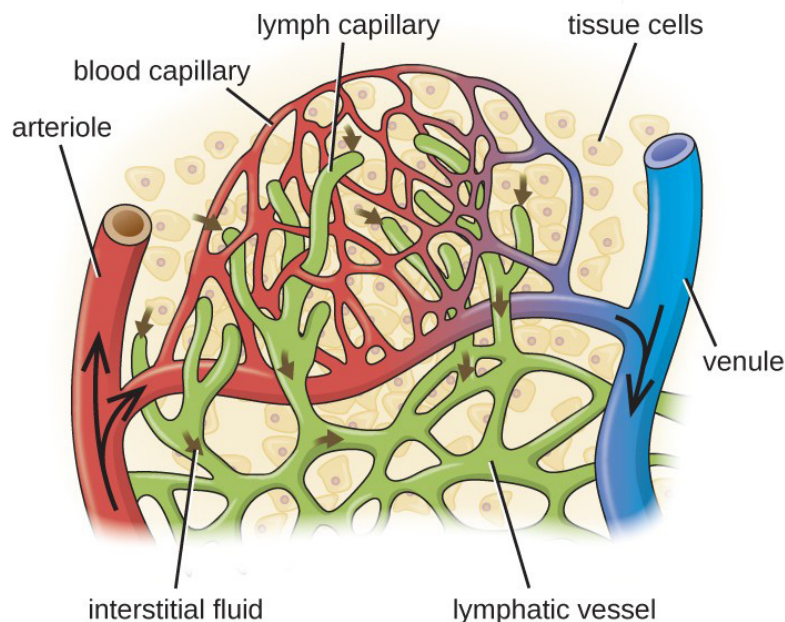
After surgery you may feel scar and shoulder pain. You may experience lymphatic circulation problems with the onset of lymphoedema (meaning that the arm on the operated side may increase in volume). You may also have pain, tingling, lack of sensitivity or unpleasant sensations in the armpit and on the arm due to alteration of the small nerves in the armpit responsible for sensitivity.

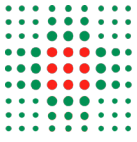
To help you through this phase we have produced the booklet you are now reading, where we describe the importance of re-educational exercises to be done after breast cancer removal surgery breast.

WHAT IS THE LYMPHATIC SYSTEM

The **LYMPH** is a light-coloured liquid that flows inside the lymph vessels. The journey of lymph, its stop in the lymph nodes and the operations that take place within the lymph nodes have the task, among others, of protect us from infection.

The **LYMPHATIC SYSTEM** consists of small tubes called lymphatic vessels, which contain and transport the lymph, and by small nodes called lymph nodes that constitute real “filtering stations”.

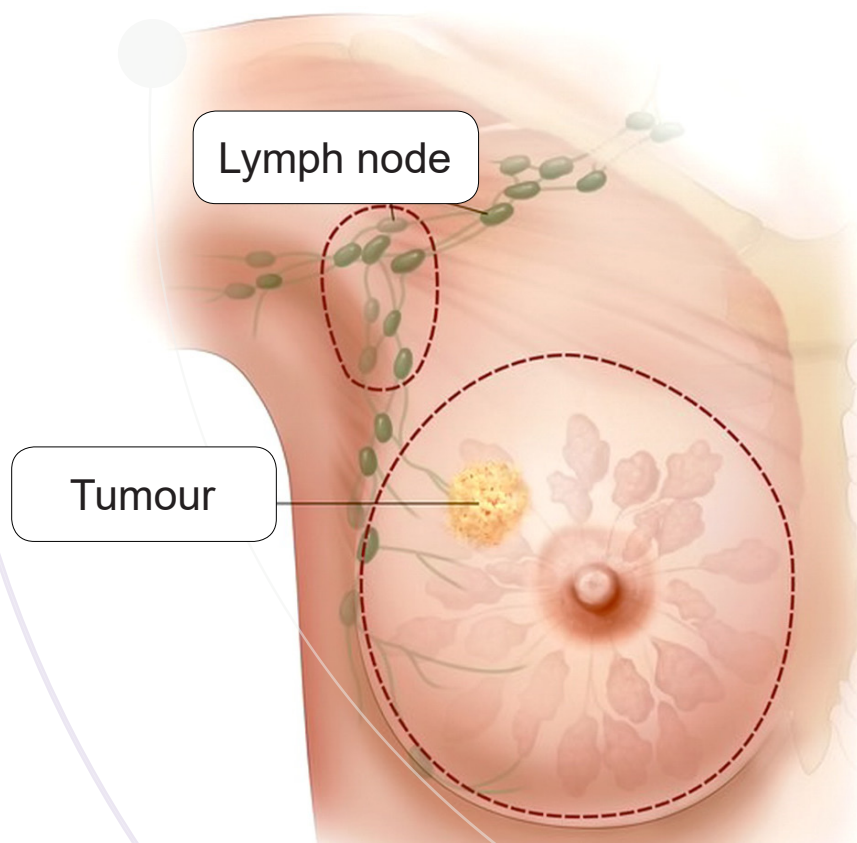




THE LYMPHATIC SYSTEM IN THE BREAST (SENTINEL LYMPH NODE)

The breast, like any other organ, contains a network of lymphatic vessels that flow in the lymph nodes of the armpit.

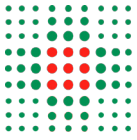
WHAT IS THE SENTINEL LYMPH NODE. It is the first lymph node to receive the lymph that arrives from the area of the breast where the tumour is located. It is therefore the first lymph node in which tumour cells transported by lymph.



When one is not sure whether the armpit lymph nodes are attacked by the disease, only the sentinel lymph node is surgically removed; this technique allows, where possible, not to remove the other lymph nodes in the armpit cavity.

Only when the tumour is also present in the lymph nodes of the armpit it is necessary to perform surgery to remove all lymph nodes (lymphadenectomy).

Once the lymph nodes have been removed, they no longer grow back. The lymph circulation still occurs through alternative routes (collateral circles) but may be less effective.



THE LYMPHEDEM

A possible complication of the removal of the sentinel lymph node or axillary emptying surgery is the accumulation of lymph axillary emptying is the accumulation of lymph, which increases the size of the arm, forearm and hand (**LYMPHEDEMA**).

The occurrence of lymphoedema depends both on factors, individual's own factors as well as factors related to therapeutic interventions.

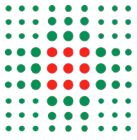


WHAT CAN HAPPEN AFTER SURGERY

Immediately after the operation you may feel a sensation of soreness or localized pain in the chest and armpit area. To decrease inflammation and pain, the surgeon may prescribe specific medications, such as painkillers.

The pain may depend:

- the position in which the arm is placed on the operating table and the duration of the operation;
- from surgical operations performed on the tissues of the armpit and arm as well as from the possible removal of lymph nodes.



WHAT SHOULD I DO AFTER ARM SURGERY

EXERCISES TO DO IN BED IMMEDIATELY AFTER THE OPERATION

One must avoid holding the operated arm dangling downwards (do not hold it with the hand pointing downwards).

The arm should be supported with a pillow placed at side of the body with the hand and forearm higher up than the arm and shoulder (pic. 1). This will help to reduce the volume of the arm.

One can make movements with the help of the healthy arm that will support the weight of the operated limb. These movements will be gradual, initially lifting the arm a little off the bed surface (pic. 2).



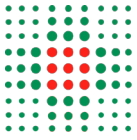
pic. 1



pic. 2



pic. 3



Once familiar with it, after a few hours, as in picture 3.

pic. 4



pic. 5



pic. 6



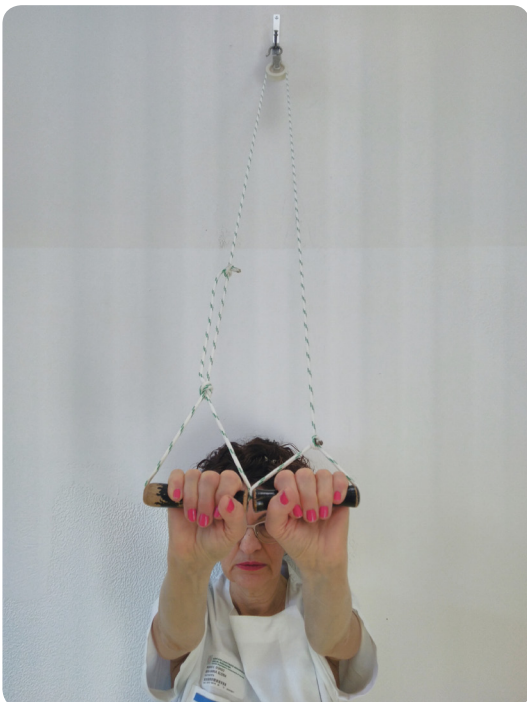
pic. 7

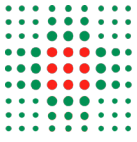


Another important exercise is to slowly moving the hand making a 'fist' and holding it tight for a few seconds; then "open maximum" the hand by holding the fingers open-extended for a few seconds. Do a series of 10 openings and closings of the hand several times a day.

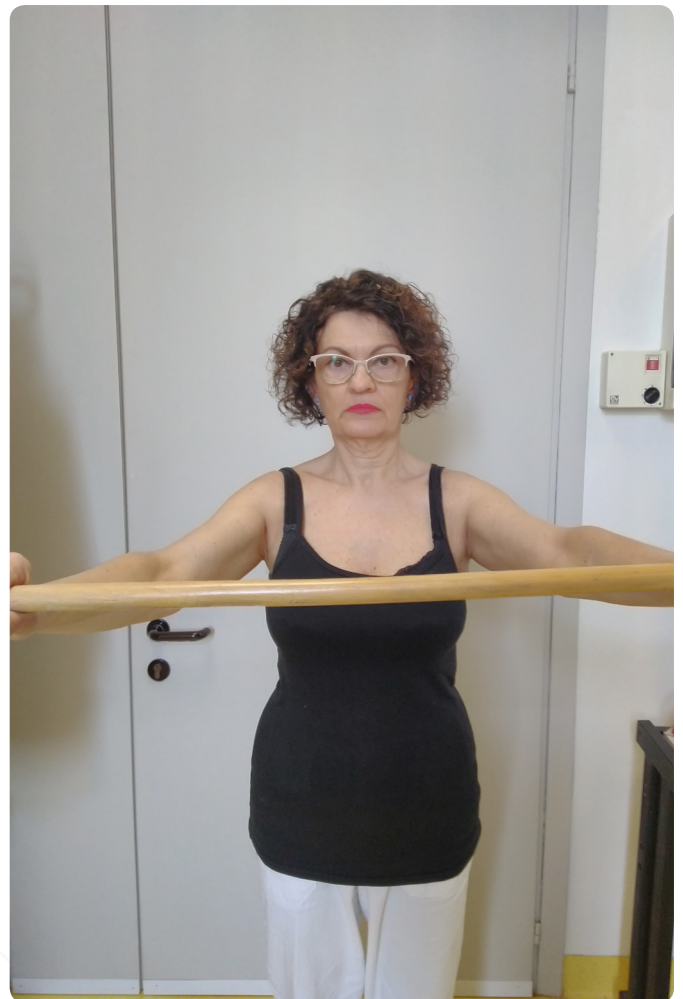
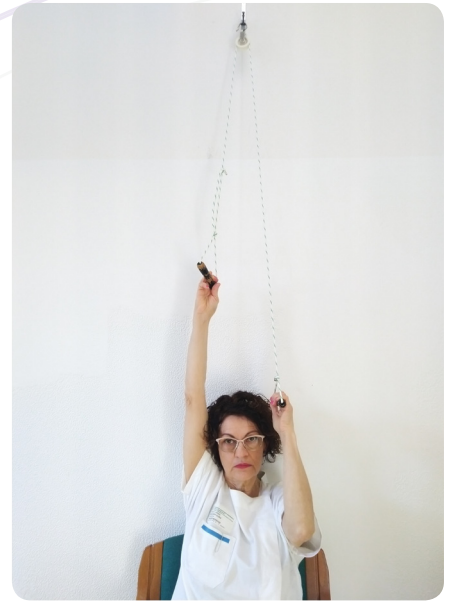
Other recommended exercises to be practised a few days after surgery and at discharge, are illustrated in pictures 4, 5, 6 and 7.

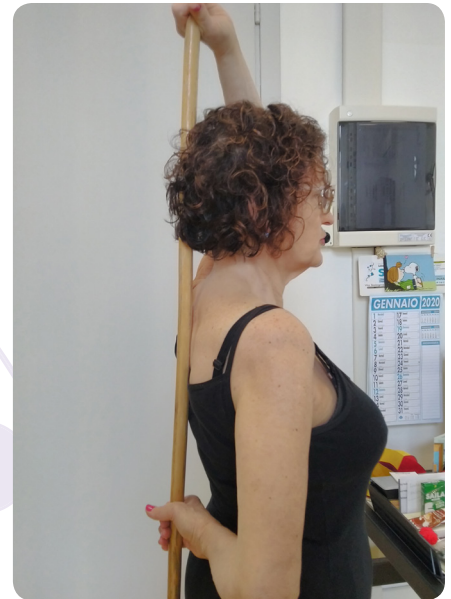
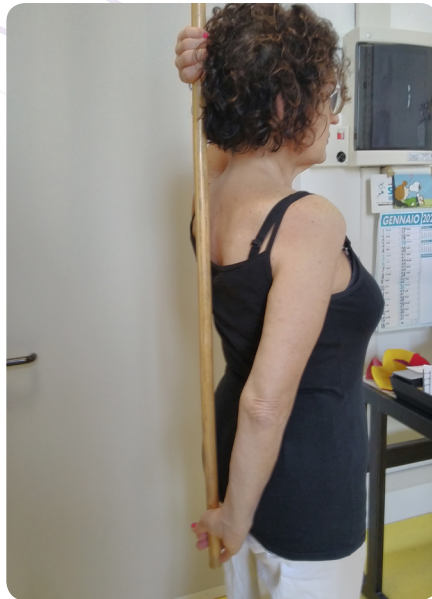
**EXERCISES TO BE DONE FEW DAYS
AFTER SURGERY
AND ONCE BACK HOME**

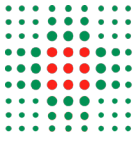




The post-operative rehabilitation phase for neoplastic breast disease







HYGIENE IS VERY IMPORTANT!

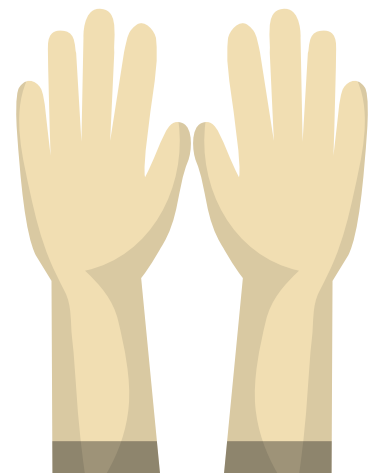
After underarm surgery, great care must be taken with hygiene and of prevention to try to prevent lymphoedema.

The precautions below should be remembered forever because they serve to avoid infection and to prevent lymphatic circulation from being obstructed (favouring the appearance of lymphoedema).



Wash and dry the skin well keeping it moisturized, healthy and free of lesions. Use lukewarm water not over 35-38 degrees.

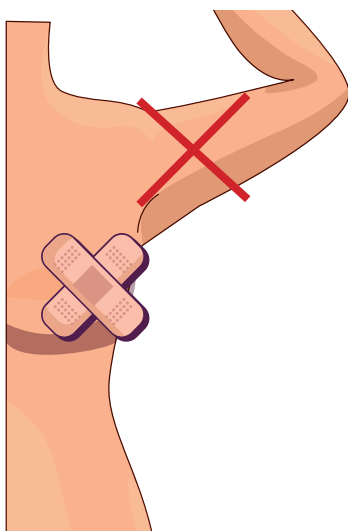
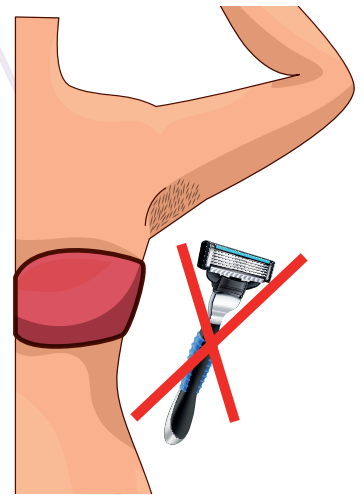
Wear protective gloves during housework and gardening.





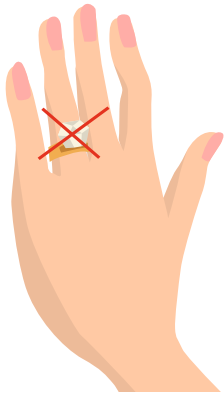
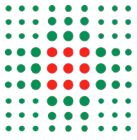
Avoid injuries (abrasions, cuts, burns, insect bites, needle pricks, scratches cat scratches, etc.). In case of cuts or wounds wash and disinfect the wound. If the wound is deep or if it takes a long time to heal to heal, seek medical attention.

Do not cut the cuticles around the nails, **do not depilate the armpit with a razor blade**, but **use an electric razor**.



To avoid infection, **DO NOT DO blood samples, phleboclysis and intramuscular punctures on the side operated.**

It is also good to avoid measuring blood pressure measurement in the operated arm operated, especially if it is **swollen** or if the tissues are inflamed (arm red, hot and painful).



Avoid restraints (rings, bracelets or clothes that are too tight) that can hinder lymphatic drainage.

Beware of the sun. The sunburns are dangerous; avoid during excessively hot hours, just as one does with children. If you are at the beach it is useful to keep a damp towel on the operated side to be more sure that the sun does not damage the fabrics. The same applies to hot water above 35-38 degrees.



Avoid sleeping on the side Operated.

HOW TO DO...

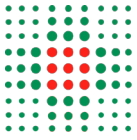
...LIFTING WEIGHTS. You must not carry excessive weights with the operated arm. Weights, like shopping bags, should be distributed between the two arms. It is better to take an extra turn - or use a trolley - rather than to strain the arm.



...DON'T MAKE TOO MUCH EFFORT. Household activities should be divided in the day and between days so as not to incur excessive fatigue and prolonged exertion.

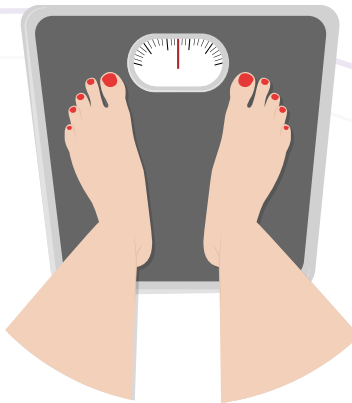
...TRAVELLING BY AIR. When travelling by air, wear the sleeve elastic.





...TO DO SPORT. Sport is good for you and you can practice especially activities that have to do with water. It is also good for aerobic activity, which often combines free-body exercises with weights (of no more than 1 kg). In any case, the physicist will be able to decide on a specific customized programme.

In Ferrara, the collaboration between voluntary associations the Municipality, and the third sector allows various activities. Ask information from the Case Manager nurses of the Senology.

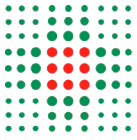


...MAINTAINING THE RIGHT WEIGHT CORPOREOUS. Controlling your weight is important. During examinations doctors will always ask for the weight updated. It is good to avoid eating too salty (one can learn to use less salt by using aromatic herbs instead). Drink at least 1.5-2 liters of water a day to purify the organism. The Mediterranean diet is still the best diet one can follow.

...REST YOUR ARM OPERATED. When you have a feeling of heaviness and tiredness of the arm you must rest. The arm must be in the “unloading” position i.e. by resting it on a pillow (as in the photo), so that it is raised 1 or 2 cm above the shoulder cm above the shoulder, so as to promote lymphatic return.



...AVOID PRESSURE ON THE SHOULDER. Pressure must be avoided on the shoulder of the bra or shoulder bags. Bras with eight-cross behind the shoulders and in any case with wide, padded straps.



HOW LYMPHOEDEMA SHOULD BE TREATED

The physicist, a specialist in the diagnosis and treatment of lymphoedema, is able to understand what stage it is at (what level of development it is at) and to recommend the most suitable treatment.

The physicist makes a total analysis of the clinical case, also taking into consideration the general clinical characteristics of the patient including other diseases and disorders.

It is not always possible to recover completely from lymphoedema, especially when the problem has created after all the lymph nodes in the armpit have been removed and the in the armpit and the operated woman has poorly ineffective collateral.

Very important is the prevention of inflammation and infection: see the hygiene rules described in this brochure.

TREATING LYMPHOEDEMA

Scientific studies show that the most effective in treating lymphoedema are:

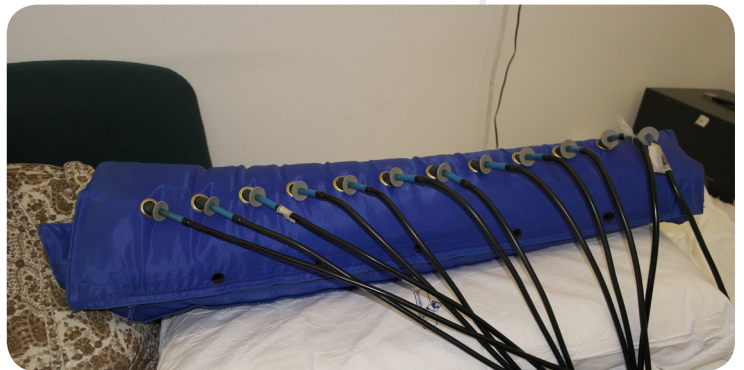
- **manual lymph drainage;**
- **intermittent sequential pressotherapy;**
- **therapeutic elastocompression.**

Treatments are prescribed by the physiatrist and are performed by the physiotherapist.

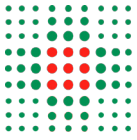
MANUAL LYMPH DRAINAGE



PRESSOTHERAPY



Both techniques are usually associated with an elasto-compression bandage.



ELASTO-COMPRESSION BANDAGING

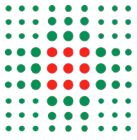


It is also important to do joint hygiene exercises related to the shoulders, neck and trunk. In fact, exercising the muscles to keep them active and toned facilitates lymphatic circulation.

At the end of the treatments, it will be possible to use elastocompressive braces (such as for example, short gloves, long gloves or full arm for the arm, as in the image below), which can be purchased, with a doctor's prescription, in health shops. You can try them on and, afterwards check with your physiotherapist and doctor whether they they fit.

Elastocompression bandaging and elastocompression braces are very effective to maintain the results obtained with lymphatic drainage and to prevent lymphoedema and its possible reappearance and to prevent its return once it has healed.





PROBLEMS BESIDES LYMPHOEDEMA

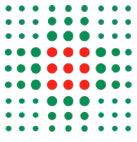
We have talked so far about lymphoedema but, after surgery, other problems may arise.

- **LOCAL PAIN:** slowly the pain of the surgical wound becomes less severe, although may reoccur in a mild manner (sensation of tingling or soreness).

- **LIQUIDS THAT FORM IN THE AREA OF THE SURGERY:** these are collections of blood (haematoma) or serum and/or lymphatic fluid (seroma). Fluids may create a swelling on the chest or in the armpit: this is nothing serious, simply the liquids in the surgery area have difficulty being drained. This problem be treated with body positions or exercises. If with the body positions and exercises, the swelling does not go down or you start to have pain, redness or heat in the area, it will be necessary to consult the surgeon.

- **ALTERATIONS OF SENSITIVITY:** the sensation of poor sensitivity (hypoesthesia), of pressure on the axillary cavity (like a pad under the armpit), tingling or burning (paresthesia) along the inner side of the arm - or more rarely of the forearm - are due to the fact that during surgery it is often necessary to cut small nerves superficial nerves. These sensations usually disappear but may remain in a mild form for long periods. To alleviate the annoying symptom you may also need medication by the doctor.

- **PROBLEMS WITH THE SURGICAL SCAR:** sometimes the scar can become hard and rigid, taking on an irregular appearance. In this case the scar may hurt and hinder movement. It will be necessary to discuss this with the surgeon or at the physiatric examination where you can be advised and prescribed specific massages to reduce the problem.



- **BREAST SYNDROME PHANTOM:** feeling of still having breast (or a part of it) even after that it has been surgically removed. Often sensations are hot, cold, itching a sense of compression or swelling, of movement, but also of pain and other uncomfortable sensations in the breast that is no longer there.

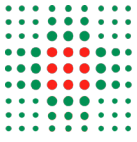
It is a frequent disorder that can present itself in different ways and at different times. It may become stronger or occur when there are changes of atmospheric pressure (change of the weather), certain states of tension emotional and/or psychic tension, hormonal changes, intake of alcohol or other substances active on the nervous and/or cardiovascular system.

It is not a psychic disorder. It is related to altered electrical activity of nerves interrupted during surgery, which collected the sensitivity of the breast, but which are still connected to the conscious areas of the brain. If the disorder is very uncomfortable, it is a good idea to discuss it with the doctor.

- **LIMITATION OF MOVEMENT OF THE SHOULDER:** is due to the position required necessary for the surgeon to make contact with the part of the breast to be removed and to “clean” the armpit from the lesion.

During the time you were in the operating theatre, the “open position of the shoulder”, which created the condition for a stretching of the soft tissues (tendons, ligaments capsule, joints). Those who had problems to the joint before the operation may return to pain and be limited in their movements. A physiatric examination will highlighted the problems and found therapeutic solutions.

- **HIGH SCAPOLA:** means that behind the back the scapula tends to remain detached from the thorax and is due to the fact that the muscle that holds it anchored to the rib cage has weakened. Sometimes this leads to a reduction in shoulder movement. At physiatric examination will indicate the treatment modalities treatment, if necessary, in relation to the problem.



- LYMPHAGITIS AND ERYSIPELAS.

Lymphagitis. It is caused by inflammation of the lymphatic vessel wall that causes swelling and redness of the arm. A sort of small, hard and painful 'rope' under the skin.

Erysipelas. When lymphagitis is combined with the presence of bacteria, we have the clinical picture called erysipelas. This manifests itself in addition to redness and swelling with pain, sudden high fever and generalized malaise. If you experience these symptoms you should immediately consult your doctor, who will prescribe an appropriate antibiotic treatment.

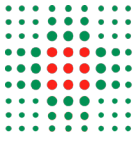
INDIVIDUAL REHABILITATION PROJECT (PRI)

The medical specialist chooses the best treatment on the basis of the clinical picture and the response to therapies, preparing an Individual Rehabilitation Individual Rehabilitation Project (PRI).

REHABILITATION IN THE BREAST (SENOLOGY) CENTRE

For all users in the Senology Centre - Breast PDTA - undergoing surgery for radical removal (mastectomy) and reconstruction breast removal or axillary cavity removal a psychiatric examination will be scheduled. For all other breast surgery, a psychiatric examination may be requested in the event of particular problems by discussing them with the surgeon or nurse Case Manager.

In the Senology Centre of Ferrara, an activated “Hospital-USL” network that unites many facilities with the task of making it easier (and as close to home as possible) for check-ups and and treatments, guaranteeing competence and uniformity of treatment.



The rehabilitation clinics of the San Giorgio are the rehabilitation reference point of the Senology Centre, where the first medical specialist visit is made to assess the situation, decide on any necessary treatments and to define the care of the woman who has undergone breast surgery.

The therapies and controls are carried out both in Ferrara and in the Rehabilitation modules based on where you resides and/or your needs.



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di Ferrara

Centro di Senologia di Ferrara



USEFUL INFORMANTION

REHABILITATION CENTRE S. GIORGIO Departmental module for activities Outpatient activities

Secretariat: 0532.238701 - 236106

e-mail: riabilitazione@ospfe.it

Monday to Friday

8 a.m. - 2 p.m.

At the “Casa della Salute - Cittadella San Rocco”
in Corso Giovecca no. 203 (former site of the Sant’Anna
Hospital), first floor, Sector 14.

SENOLOGY CENTRE MAMMELLA PDTA

0532.237862 - 239644 or 334.1365533

MONDAY from 9 a.m. to 11 a.m.

TUESDAYS to FRIDAYS from 9 a.m. to 4 p.m.

You can also leave messages on the answering machine
phone: you will be called back the next day.

BROCHURE PRODUCED BY: L. Cavazzini, M. Stoppa, S. Succi, A. Frassoldati, N. Basaglia.

*REVISED ACCORDING TO THE PRINCIPLES OF HEALTH LITERACY BY THE PRESS OFFICE (M. Malossi - V. Tomasi)
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