



**Training  
programme  
for  
breast-operated  
patients**

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Training programme for breast-operated patients  
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Thanks to professor, consultant dr. med. Mogens  
Blichert-Toft, Rigshospitalet for counselling and  
inspiration through many years.

Thanks to all my patients, secretary Evelyn Skivild and  
principal Lisbeth Holm who willingly were at our  
disposal for the photomontage of this folder.

*Kirsten Rosenlund Tørsleff*

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This training programme has been sold in more than 50,000 copies in Scandinavia at the cost price of Dkr. 45.-  
The programme has now been translated into French and an English version will follow shortly.

I have published the programme and the translations on the internet hoping that the material will be of use to  
as many people as possible.

If my programme has been of use to you and you wish to contribute financially to the further research and  
development, you can pay the amount of money into the bank account: **DK 383 000 31 5555 2476.**

## Preface

I published the first training programme in 1981, after I myself had been through surgery and one year of chemotherapy.

Since then, I have done research, gathered experiences and written articles<sup>1</sup> and I have had a lot of contact with the users of the programme from all over the country.<sup>2</sup> The exercises in the new edition are basically the same as in previous editions, as it is the same muscles that are strained by the surgery.

A new field of treatment, though, is what I call the mobility treatment (myofascial release), which alongside with the exercises is the concept, which has been tested, scientifically proven and published, in the international medical journal "The Breast". The mobility treatment focuses on the surgery scar itself but also on the area corresponding to the outline of the pectoral muscle. Due to the surgery and particularly to the radiation treatment, a pasting and a shrinking of the tissue occur, which make the scar and the area surrounding it hard, tight and inflexible. By a gentle treatment (not massaging) of the cicatricial tissue in depth it is possible to improve the mobility of the tissue. After few treatments it often occurs that the blood flow is increased, almost like opening up a tap that has been clotted.

Then, by stretching the scar and the surrounding tissue the entire surgical area is made more alive and agile and pressure on nerves and vessels is relieved.

This will increase the effect of the following exercises, which will give more mobility in the arm and shoulder joint, reduce the swelling in the arm and armpit and ease pain.

The mobility treatment (myofascial release) is to be performed as soon as possible after the surgery – and after one to two times every day before the exercises.

I would like to thank Danish Physiotherapists for taking over the distribution of the training programme to the nation's hospitals and practicing physiotherapists, which benefits the patients who have undergone breast surgery.

*Kirsten Rosenlund Tørsleff*

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<sup>1</sup> Go to my website: [www.kirstentoersleff.dk](http://www.kirstentoersleff.dk)

<sup>2</sup>

<b>1981</b>	Training programme for breast operated patients
<b>1986</b>	The physical aftercare of cancer mammae patients – article in the monthly paper for Practicing Doctor
<b>1987</b>	Nationwide study of genes as a result of breast surgery
<b>1995</b>	(In co-operation with 3 doctors) long termed consequences seen in breast operated patients article in the Weekly paper for Doctors based on a questionnaire study in the Southern Jutland county
<b>2000</b>	Physiotherapy treatment of late symptoms following surgical treatment of breast cancer – article in "The Breast"

## Simple specific exercises for the first four days after surgery



### Exercise 1:

Place your arm in a bent position away from the body (approx. 90 degrees), possibly resting on a footstool. You are to hold this position for two to three minutes. The purpose of this exercise is to assume almost the same position as during the surgery. In this position your armpit will be free and a gentle, passive stretching of the pectoral muscle will occur. Several muscles in the

armpit will be relieved of both tension and stretching, and the blood flow to the arm will increase. In addition, a gentle stretching of the nerve and vessel tissues will occur. After approx. two to three minutes, combine this exercise with pressing the shoulder gently down against the bed, thereby pressing the shoulder blade towards the ribcage. Repeat four to five times and hold the position for about ten seconds every time. Repeat the whole exercise two to three times daily.



### Exercise 2:

Place one hand on your chest just below the collarbone. Hold this position until you feel warmth. This exercise provides gentle stimulation of the surgical area. Keep in mind to touch the area gently the first couple of days. Remember to take deep breaths several times during the exercise. Repeat the exercise two to three times daily.



### Exercise 3:

Stand up with a small distance between your feet with your weight on the front of the foot and bend your knees a bit. Lift both your arms, bend your hands upwards so the palms are facing away from your body and hold this position until your fingers start tingling. Don't lift your arms higher than you can hold your shoulders in a relaxed position. You should feel your fingers tingling and your hands regaining warmth as you put your arms down beside your body again.

### Exercise Exercise 4 (page 5 in the leaflet)

It is important that you assume the position of rest and do the breathing exercises on a daily basis.

**After doing these four exercises during the first 4 days you can start using the entire training programme in this leaflet: you should start with the exercise at the top of page 20 before using the other stretching exercises.**

*Kirsten Rosenlund Tørsleff/March 2009*

## Position of rest and breathing exercise



During the first period of time after the surgery you might have trouble finding a comfortable position of rest.

Lie down on your sound side, place a pillow (preferably a large pillow) under the “operative arm”. In addition you may place a pillow under your top knee as well.



The tension affects your breathing. Therefore, the first condition for relaxing is being able to control your breathing and doing it the right way.



Breathe slowly and deeply. Use the lowest part of your ribcage. For example, picture yourself wearing a swimming ring around your waist, which you wish to fill with air.



Breathe out slowly.



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At first you'll be tempted to hold your arm close to your body and support it because the wound feels tight and the drainage tube is bothering you.

However, this will be the start of some inconveniences:

- Pain in the arm.
- Limited movement in the shoulder joint.



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Instead, try walking around with a natural swing of the arm from the start, even though you feel tightness in the arm and around the wound.

## Treatment of the scar and the entire area corresponding to the pectoral muscle

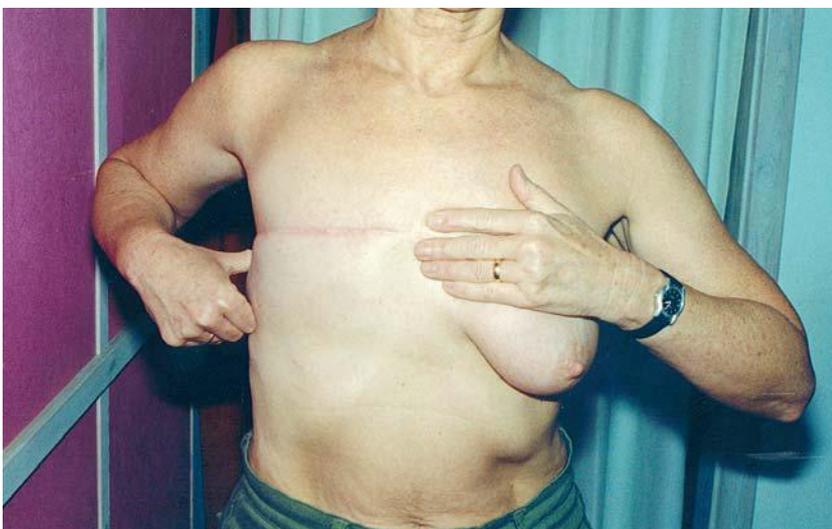
The treatment is necessary in order to increase the blood flow and maintain the mobility of the tissue.



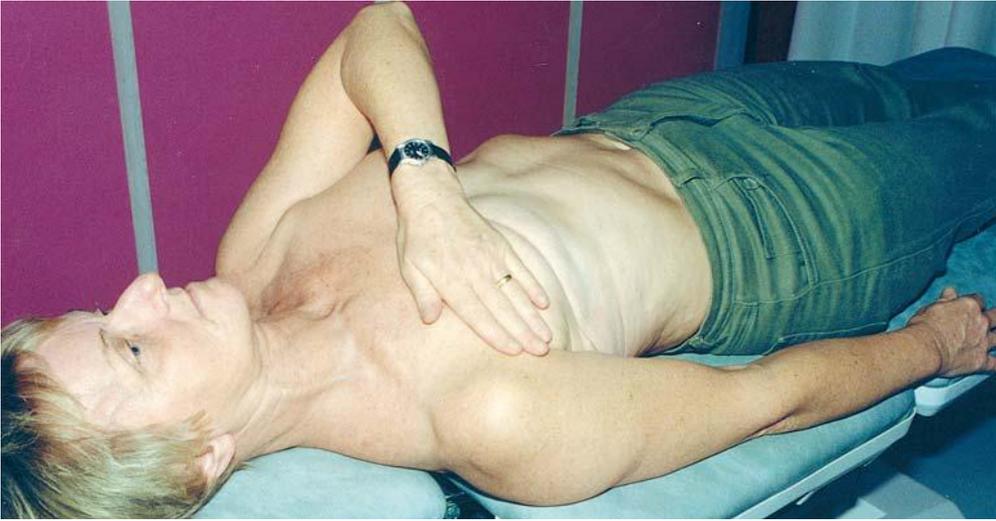
Hold part of the scar with two or more fingers and pull in the longitudinal direction of the scar. Pull till you feel it tightening and let go when the tightening fades.



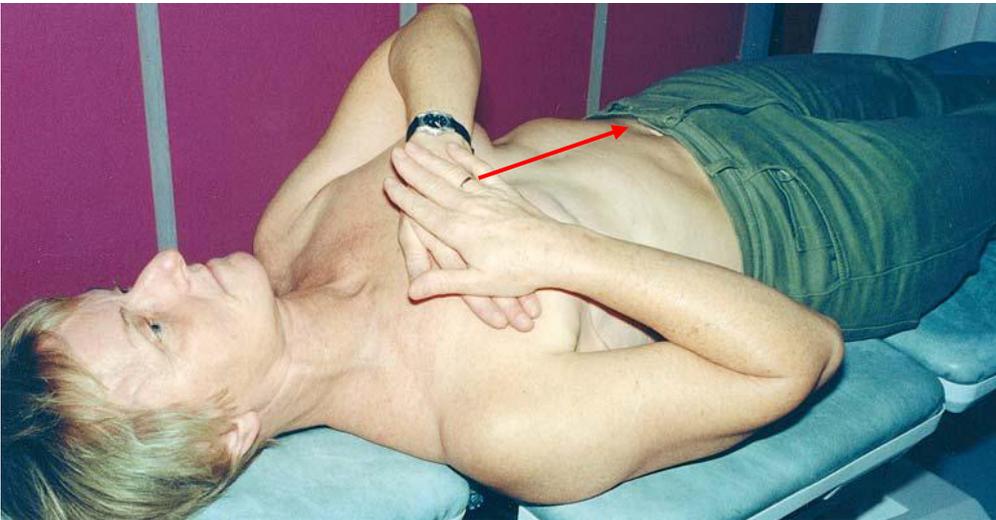
Move your fingers and pull in the next part of the scar.



Pull in each end of the scar. Hold until the tightening fades. Remember to throw out your chest simultaneously.



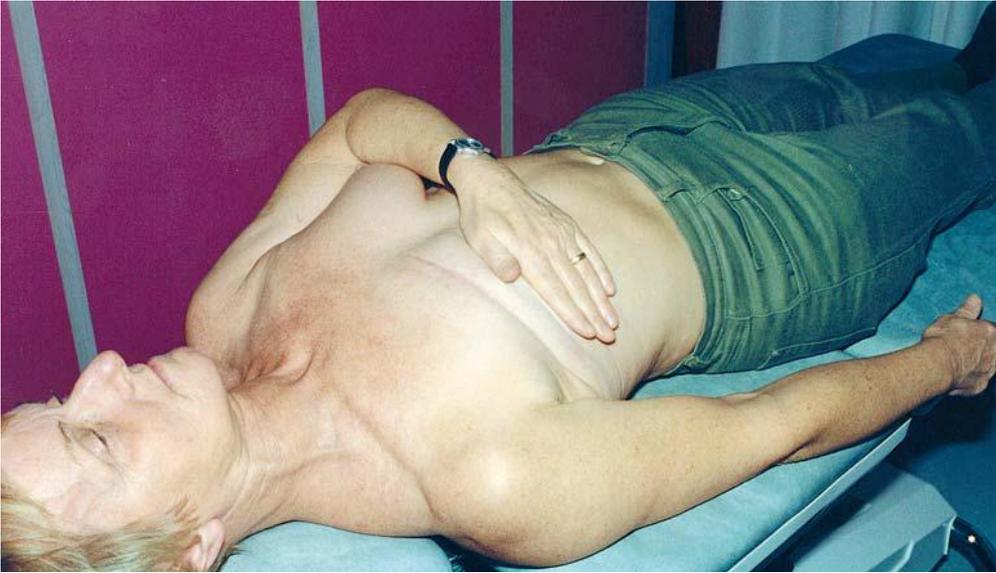
Place one hand on your ribcage just beneath the collarbone. Use the palm.



Place the other hand on top of the first one. Press in the depth, and at the same time pull carefully **downwards** in the direction of the arrow. Hold this position until you feel warmth.



Hold with both your hands a little bit further down your ribcage. Use the same technique.



Place one hand a hand's width beneath the scar



Place the other hand on top and press gently in depth and pull **upwards**. Hold this position until the tightening fades and until you feel warmth.



Place one palm on the side of the ribcage beside the scar.



Place your other hand on top of the first one and pull towards the middle.



Place your hand on the middle of your ribcage.



Place your other hand on top of the first one and pull from the middle and out. Hold this position until the tightening fades and you feel warmth.



Place one hand at the back of your head. Place your other hand on your ribcage just beneath your armpit. Press downwards and at the same time press your elbow carefully against the bed. Hold this position until the tightening fades.



Place your arm in a bent position away from the body (approx. 90 degrees). Lie in this position for two to three minutes.



Afterwards, rest your stretched arm on the chair away from the body. Turn your head to the opposite side and let your arm lie **completely relaxed** for about two minutes.



Later on you can do the exercise with a bent arm. Approx. 10 cm of your upper arm must rest on the bed, but let the rest of your arm be without support.



Do the same exercise with a stretched arm, turn your head to the opposite side. The arm must be relaxed.

## Posture exercises and stretching of muscle, vessel and nerve tissue



Stand up with a short distance between your feet and your weight on the front of the foot. Bend your knees slightly.



Lift both arms, bend your hands upwards so your palms are facing away from your body and hold this position until your fingers start tingling...

...as I'm demonstrating for the patient.



Lower your arms and hold this position until your fingers regain warmth. Repeat the exercise two to three times.

## Treatment after breast preserving surgery

The treatment is given in order to preserve the mobility (myofascial release) and the blood flow, so that tightening of the breast is easier avoided. The treatment also needs to be carried out while you are getting radiation treatment, though adapted to the circumstances.



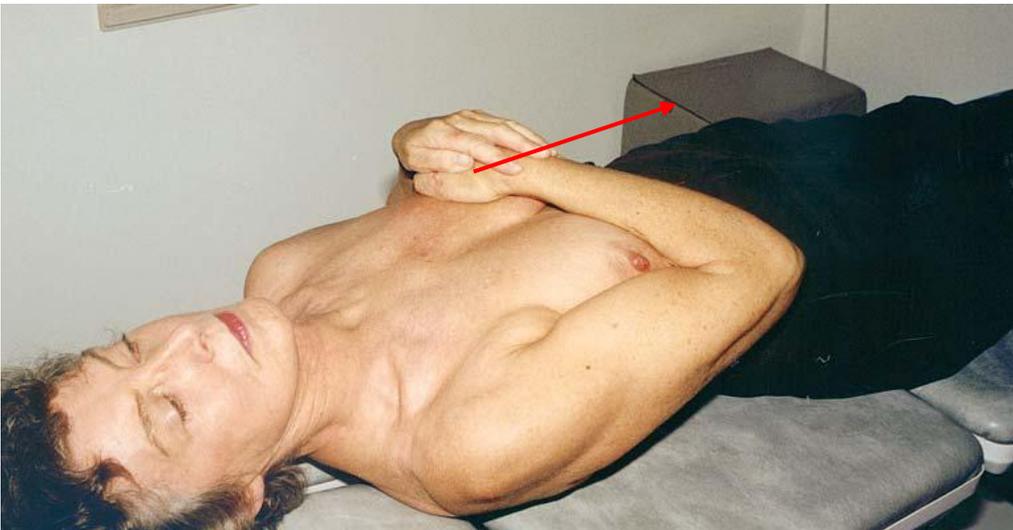
Pull in opposite directions in the top scar and hold until the tightening fades.  
(Getting a hold of the top scar may be difficult).



Pull in the scar on the breast.



Place both hands on top of the ribcage, just below the collarbone. Press downwards in depth with the palm and pull gently **downwards** in the direction of the arrow. Hold this position until the tightening fades and you feel warmth.



Place both hands a little further down the ribcage and repeat the exercise.



Place both hands below the breast and pull **upwards** in the direction of the arrow. Hold this position until the tightening fades.



Place one or two hands on the side of the ribcage and pull towards the middle...



...in the direction of the arrow.



Place your hand on the middle of the ribcage.



Place the other hand on top and press in depth and pull in the direction of the arrow.



Place the bent arm away from the body in a 90 degree angle so that it is lying relaxed and a little lower than your body. Turn your head to the opposite side. Hold this position for two to three minutes.



The same exercise with stretched arm.



At a later stage, this exercise can be done with bent as well as and stretched arm without support. (10 cm of the upper arm must rest on the bed). The arm must be completely relaxed.



## Stretching exercises

When a muscle becomes too short, a tension will occur in it. The muscle will become sore, will have more difficulty handling strain and it will have a harder time performing the movements it was created to perform. It is only natural that the muscles that have been affected during surgery will become too short. This applies to both the big and the small pectoral muscles. Other groups of muscles will usually also be affected by the surgery, especially the occipital and shoulder muscles, the muscles between the ribs and the muscles that hold the shoulder blades in place, as your whole movement pattern is changed.

Do the following exercises while breathing deeply and steadily. You will experience the best results if you stretch the muscles during and immediately after the expiration.

## Stretching exercises for arm and pectoral muscle



Starting position: weave your fingers on the back of your neck, elbows pointing forwards.



Bend your back slightly.



Stretch your back and move your elbows backwards at the same time. Hold the final position for about 10 seconds. Repeat three to five times, three times daily.

The exercise can also be carried out in a lying posture and should commence the day after the surgery.

## Stretching exercises for arm, back and pectoral muscles



Sit down on the floor or on a table with your legs stretched. Place both palms behind your back. Stretch your back backwards, throw your chest forward and the head backwards while pulling in your chin at the same time. Hold this position for about 20 seconds and repeat the exercise two to three times.

## Stretching exercise for arm and the side of your body



Stand up with a short distance between your legs, bend your knees on 1, push your hip out to your right on 2, hold your right arm stretched over your head on 3 and pull in your right arm with your left hand on 4. Hold your wrist. Stretch until you feel the tightening and hold the position until the tightening fades. Repeat two to three times. Do the same to the opposite side.

## Stretching exercise for the pectoral muscles



Stand up in a walking posture with the entire left forearm resting on the doorframe.



Lean your upper body forward, as you bend your right knee slightly until you feel the tightening. Hold this position until the tension fades and until your fingers start tingling. Lower your arm and wait until your fingers regain warmth. Do the exercise two to three times. Repeat the exercise with the opposite arm.

After having stretched the big pectoral muscles in both sides, you are now going to stretch the small ones in the same way.



The starting position is the same as in the previous exercise, except that this time the left arm has to be stretched along the doorframe as high as you can reach. Lower your left shoulder.



Lean forward until you feel the tightening and hold the position until the tension fades and your fingers are tingling. Lower your arm and wait for your fingers to regain warmth. Do the exercise two to three times. Repeat the exercise with the opposite arm.

## Stretching exercise for occipital and shoulder muscles



Place your left hand on top of your head and pull gently towards the left side. Wait until the tension fades.



Tilt your head sideways until you feel the tension. Hold the position until the tension fades.

Since the occipital and the shoulder muscles have different stretching directions, it might be necessary to vary the pull during the exercise.

## Pumping exercises

The pumping exercises can be commenced approx. 2 weeks after the surgery.

Repeat every movement approx. 10 times, one to two times daily.

Do the exercises over a four to five month period or as occasion requires.

By doing these exercises you can give a form of active massage in order to prevent increased tension and pain in the muscles.



Grab a hold of the muscle with your **opposite** hand, so the palm of the hand is on the front of the muscle and the fingers on the back of the muscle.



Squeeze flatly around the muscle and do loose arm swings up and down.

## Pectoral muscle and armpit



Grab a hold of the muscle with your **opposite** hand so the thumb is placed on the front and the remaining four fingers in the armpit.



Swing the arm up and down like before.

## Upper arm



Front:  
Grab a hold of the biceps with your thumb on the **inside** and the remaining four fingers on the outside.



Bend and stretch the arm, and at the same time squeeze around the biceps. Make a fist...



... and stretch your fingers.

## Forearm



Place the four fingers on the muscle by the elbow and make a fist Place the four fingers on the muscle by the elbow and make a fist...



...stretch your fingers (eight to ten times) and move your grip downwards a little bit at a time towards the wrist as you repeat the fist-stretch movement before every move of grip.



Grab a hold of your thumb and place the four fingers on the back of your hand .....



... bend and stretch your fingers.

## Training of the muscles of the back

You must not neglect the muscles between the shoulder blades and the muscles keeping the blades in place in the daily training programme, as this training is of importance to the muscles on the front and the strain on the arms by for example lifting.



Pull the shoulder blades toward each other and let your arms hang loosely alongside your body.



Lift your arms out from your body until they are level with your shoulders while you pull the shoulder blades **downwards**.

Hold this position for five to ten seconds.

Lower your shoulders and keep your arms relaxed.

Lower your arms to starting position.

In the beginning, the exercise can be done without holding weights in your hands, but in order to obtain the correct training of the muscles, you should be able to carry out the exercise with a half or one kg in each hand. Do the exercise three to five times, one to two times daily.

Can also be carried out in a standing posture with your knees slightly bent.

REMEMBER: you can avoid discomforts that might appear eventually, by doing the exercises from the start – and continue the exercise programme for at least one year.

Best regards  
*Kirsten Tørsleff*