

Rotator Cuff Surgery - and PPS.

This has been compiled with the help of polio survivors at different stages of having this surgery over the last six months. My thanks to Janet, Barbara, Peggy, Richard and Anita. The rotator cuff is your shoulder joint. The surgery can be done in two ways, open or arthroscopically.

More and more polio survivors with painful shoulder/s are eventually having/requesting an MRI and finding that the damage to their rotator cuff is **more** than their doctor expects. ("orthopedic doctor she referred me to, jumped to the conclusion that it was only a small tear, and that I wasn't a candidate for surgery...all without doing any x-rays, MRI"). Normally one of the rotator cuff muscles is torn by a fall or injury. ("walked around the bed to get to the bathroom in the dark. I tripped over a laundry basket and fell"). Polio survivors can have all three muscles torn, and sometimes the biceps tendon is also frayed. Rotator cuff tears can happen after a fall or injury to the shoulder but in polio survivors this can also come on over time due to the many years of using ones arms as extra to the legs to rise and lower from chairs/floor/transferring.

For a polio survivor - especially one who is already experiencing some late effects of their polio - any surgery has to be considered carefully. Surgery on your shoulder/s means that at least one arm is going to be out of action for some considerable time post surgery. Full recovery with 90 to 100% return of function from rotator cuff surgery for a polio survivor can be nine months to a year. There are stages to go through and it is imperative to assure yourself that you can transfer yourself or with help for all actions of necessary daily living till you are able to use this arm normally again. Until you strap this arm to your body you may not realise how much you do with it. (Further info later in article). The following are the general instructions for post surgery.

Six weeks with no use of the arm at all. The arm is held in a sling and swath. There are below elbow and hand exercises that you need to do to keep the swelling down. Therapy is necessary to ensure that your arm does not stiffen up and that range of movement is kept. The therapist will move your arm for you ensuring that you do not use the repaired muscles. ("It's painful, bearable but essential")

Six weeks to six months you can now move your own arm with restrictions and you must put it daily through its range of movement and work to a treatment plan. ("You cannot use your cane with this arm, you cannot use it to transfer, you cannot lift more than the weight of a mug of coffee")

From six months on you can start lifting more weight, using that cane again, and start using it to transfer. (You will be given extra exercises)

Pain after the operation is high. ("I was asked how bad my pain was between 1 to 10, I said 20. I told her it was easier to have a baby, and I meant it.") Richard

had a local anaesthetic pump directly into his shoulder for three days, plus he had a morphine pump for 36 hours whilst he remained in hospital. After this he was prescribed strong painkillers and over the counter analgesics in addition. He had to take all these on a regular basis plus use heat and freezer packs. (Said by many "My arm muscles would go like 'hard rocks' which was very painful"). The pain gradually lessens but this continues for some months. Janet now eight months post surgery "The pain is still so bad from the shoulder down to the hands. But, I've stopped taking regular Tylenol as my fingers started to swell." Richard now three and a half months post surgery "at last I am having some pain and drug free hours but I still need some over the counter analgesics most days"

The biggest problem is frustration in not being able to use the arm as you want to. Depending on how much use you have of your other three limbs this can cause a variety of problems. What you need to do is to practice pre operation and plan ahead. Using aids and assistive devices that you might only need for a while post surgery to help and make sure you do not fall and damage the surgery is essential.

Finding comfortable positions comes a close second especially as sleeping on the operated side is not possible for some months. Janet says "I made a nest with the bed pillows and got in the middle". Having a variety of sizes of pillows available is helpful.

Before you agree to this operation ensure the health professionals involved are fully aware of polio and its late effects. It is imperative that your muscles, in all limbs, are graded correctly. In the States medical professionals specialise far more than in the UK and one surgeon does arms and another legs and sometimes even just parts of them. Therefore it is imperative that they realise what you do with this arm, and that having it out of action for this length of time could make a drastic difference to your life.

It is advisable to ensure that your surgeon and anaesthetist are aware that polio survivors can experience problems with anaesthesia and positioning on the table and in recovery. Provide them with copies of the articles on anaesthesia and PPS in case they have not read them. If you are still concerned then ask to speak to them again explaining that you are not questioning their knowledge or expertise but for your own peace of mind you need to be sure that they do not think you are 'an awkward patient' but an informed one about your own condition and previous experience. Richard says "shortly after I came round I was having difficulty breathing and they raised the back of the bed to help but made it worse. I needed to be laid flat with a small roll of material under my neck and it took him some minutes before they understood. As soon as they did this then I could breathe so much more easily." As for the most part we are totally unaware of what happens in the operating and recovery room it is essential that you ask for an honest report so that if you have another operation you can pass this information on.

It is important that your stay in hospital, which is likely to be longer than for a non polio, goes well. Whereas for many non polios this can be done in a day surgical unit, it is likely and preferable that you stay at least one, possibly two nights. If you have special needs with transferring, toileting, dietary, then it is advisable to have someone with you who understands all this and can do the talking for you for those first few hours/day or two. It seems surprising that facts like 'no dairy' can produce food with "oh its only got 2% milk in it, I am sure that won't harm you".

Most hospitals procedure is to ask you NOT to bring your own drugs in with you. If you need to take these drugs at a certain time of day - even though you have pre informed them of this fact - then it is advisable that the person with you has these drugs with them in the event that they have not been prescribed. Richard "I take regular drugs that I could not take for 16 hours. As soon as I was aware enough I asked for these drugs to find that they had not been prescribed and we had to use those brought with us". In Britain we are usually given drugs for a few days to take home with us giving us time to get someone to take our discharge letter to our doctor and the next day pick up the prescription that has been advised in the letter. In the States you are given a prescription on the day you leave starting with the next dose after leaving hospital. With drugs only four hours apart this does not allow a lot of time, but with the knowledge in advance you can prepare for this.

As mentioned before it is really helpful if you can meet the post operative therapists before the operation so that they can see how you manage your daily activities. The best thing you can do is to put that arm in a sling for a few hours over two or three days and go through your actions of daily living and pick out where there are problems. You can then show this to your post operative therapists and between you work out ways to cope, and what aids you might need to use for a few weeks/months to make life easier. It might mean that to begin with you need someone with you 24 hours a day to assist with toileting, dressing especially if you wear orthotics or need both hands to put on shoes, and making meals for you.

The other reason for meeting the post operative therapist pre the operation is that apart from seeing how you do what you do (which is likely to be different from the norm). They can also go through the post operative exercises with you so that you know what to expect and they know how far and how often you can do them now. Its useful to do these exercise with both arms if you can to ensure that you do not stiffen up. Remember that unless they are and have been working with polio survivors who have late effects of polio they may not understand that you cannot repeat the exercises the number of times they would expect from a non polio, and that you may not be able to do more than a few minutes at a time. ("They thought I was being a wimp till they read some info on PPS") By meeting with them pre operation you can explain and show them how

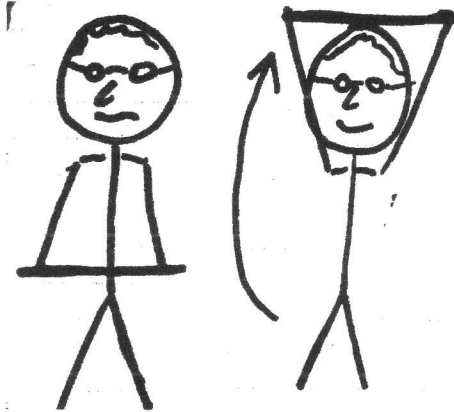
you use your muscles and work out a possible schedule. Pain will be a factor post operation, and their moving your arm passively for those first six weeks will hurt but it's absolutely necessary to keep your range of movement and prevent adhesions.

If you use a chair or scooter and are told that you cannot have it in hospital then ensure that the manual chairs that you might have to use are wide enough to accommodate you and your arm in a sling, do have removable sides and foot rests if you will need them moved to transfer.

Richards therapist - Cordell Carmalt - provided us with a set of exercises for the six weeks to six months period. Richard worked out a system that brings these exercises into his daily routine, so that he does them bit by bit during the day, pacing them with his level of daily activity. For instance when watching TV he will do a couple of arm movements each time there is a change in program or advert break. This way of pacing these exercises has worked well for him. I also do some of these exercises and my range of movement is improving slowly. Remember you must check with your GP or therapist before starting any non prescribed treatment.

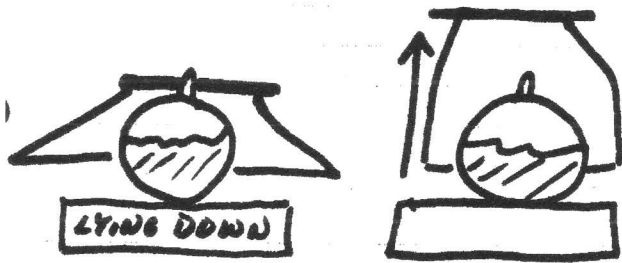
SIX WEEKS POST ROTATOR CUFF SURGERY EXERCISE PLAN FOR POLIO SURVIVORS.

IMPORTANT - This exercise plan was prepared for a **specific person** to start six weeks post rotator cuff surgery. If you have this surgery your therapist will give you a plan for you. However, you can use these exercises to help you keep supple. Check with your GP or therapist first that it is OK for you to do each exercise. Start slowly repeating them to your level, rest in between if necessary. You need not do them all at once, try fitting them into your daily pattern of living. Cordell Carmalt OTR/L, Bradenton,

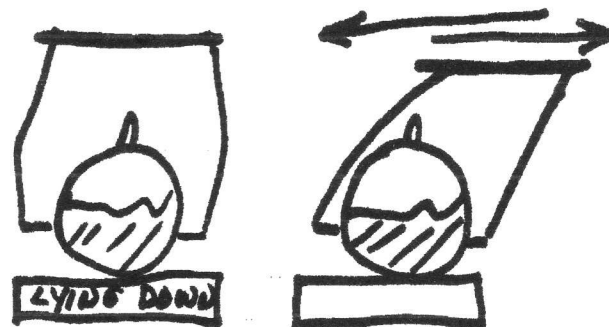


Dowel Exercises
1" PVC pipe 20" to 24" long

1.
Start Lying Down.
Keep elbows straight and pull dowel back as far as possible. Stretch that shoulder!
Return to Start and Repeat.

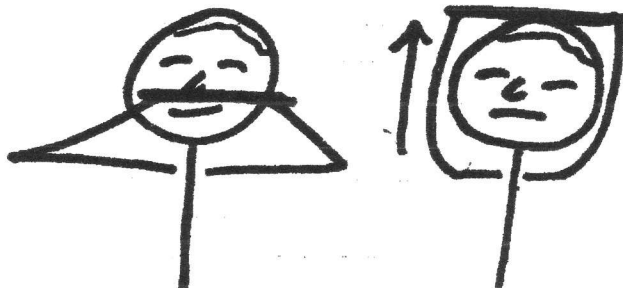


2.
Start Lying Down.
Start with dowel below chin level if possible.
Push straight up. Try to touch the ceiling by lifting your shoulders off the bed.
Return to start and repeat.



3.
Start Lying Down with dowel above head.
With elbows straight, move dowel as far to the right as possible. Then to the Left.
Stretch those shoulder blades.
Do five each way if possible.

After 2 weeks, do these first three exercises sitting up and add the following one.

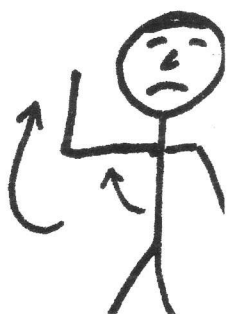


4.
Sitting Up.
Start with the dowel under your nose.
Push straight up high as you can.
Return to Start and repeat.

RANGE OF MOVEMENT / STRETCHING

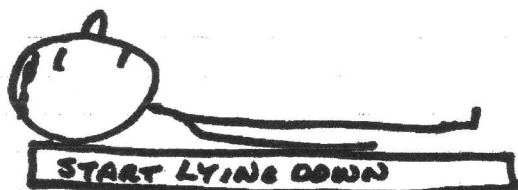


5.
Start lying down.
Shoulder Abduction.
Slide arm on bed
Then turn hand so that palm faces you
above shoulder height.
Try to bring arm up to the side of your head.
Go as far as possible,
Then let your carer/therapist stretch you
as far as you can go.
Return to Start.
Repeat.



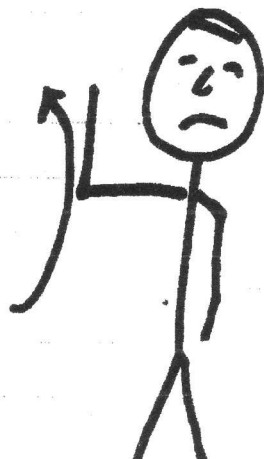
6. Rotator Cuff.

- Start lying down and with arm at side.
Pull Arm into 'I Swear' position.
Return to Start without stretching.
Repeat



7. Shoulder Flexion.

- Start lying down with arm at your side.
Keep elbow straight.
Pull arm behind head as far as possible.
Use all your strength coming back,
then have carer/therapist stretch you as
far as you can stand it, but keep trying to pull
the arm back with your own muscle power
(hurts less after rotator cuff surgery if you do
this)
Return to start. Repeat.
Stretch should be done every day until you
have achieved normal range of motion.

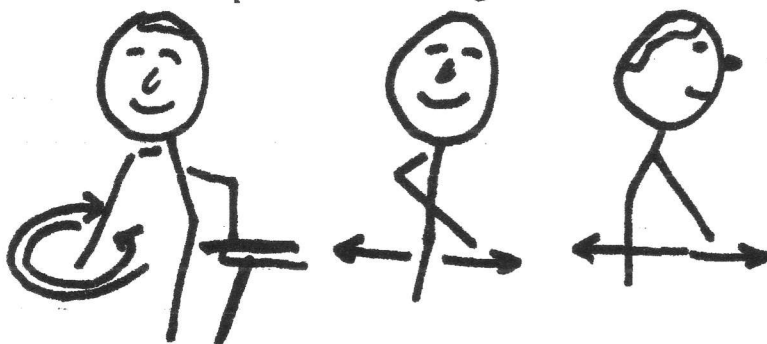


8.
Start lying down
Place arm in internal rotation as shown.
Rotate your arm back and try to touch the bed with
the back of your hand.
Then rotate the hand downward and try to touch
the bed with the palm of your hand.
Have carer/therapist stretch you in both directions.
Try to pace yourself.
Remember if your shoulder is comfortable at your
end of range of motion when you are exercising
you are not gaining!
Go into the Uncomfortable Zone.



9.

Start sitting with arms down.
Pull up to the 'I Swear' position.
Pull hand back as far as possible.
Return to Start and Repeat.



10.

Standing. Place one hand on a table or the back of a chair and lean over slightly. Have your arm go in ever larger circles, then side to side, then front to back. This loosens the shoulders. Make movements as big as you can.



11.

Face wall with hand at side. Keeping elbow straight, but barely touching the wall with 'walking fingers' bring arm up as high as possible. Mark progress with pencil or tape a yardstick to the wall to mark progress. Push for higher and higher.

Face to the right/left and abduct your arm up the wall as far as you can. Barely touch the wall use 'walking fingers'. Mark your progress. Once you can get it higher than your shoulder turn your hand palm up to go higher.

12.



Other exercises that you can do to help you keep your arms supple and prevent oedema post surgery. In the short run oedema (swelling) delays healing and increases pain and stiffness. In the long run this causes fibrous deposits in tissues, making them seem woody, causes scars to form between layers of tissue and reduces the nutrition and elasticity of nerves, vessels, joints and muscles. These exercises can be done at any time to help keep you supple. Remember to do them to your own pace and repeat as often as you are comfortable with. Try fitting them into your daily routine.

- 1 Lying on your back with your arms by your side raise your arm from elbow to hand up and down.
- 2 Sitting with arms by your side turn your wrists over and back again, up and down.
- 3 Make a fist, being sure each joint is bending as much as possible. Relax and then straighten fingers as much as possible. Relax and repeat.
- 4 Holding hand palm upright and in line with arm bend top two sets of knuckles down and back.
- 5 In same starting position bend all fingers down to 90 degrees and back again.
- 6 In same starting position touch thumb with each finger.
- 7 In same starting position touch base of little finger with thumb.