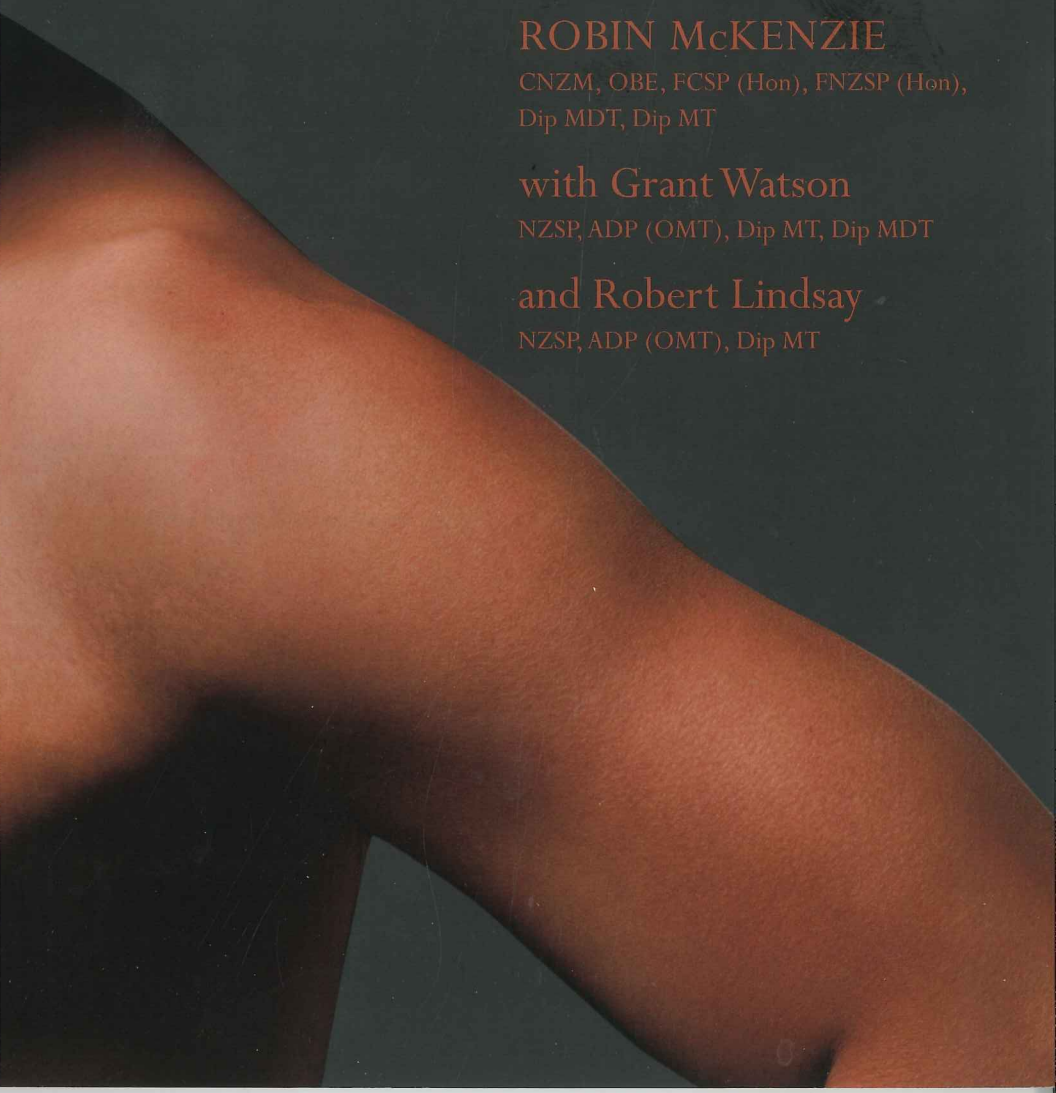
McKENZIE METHOD

TREAT YOUR OWN SHOULDER™

ROBIN McKENZIE
CNZM, OBE, FCSP (Hon), FNZSP (Hon), Dip MDT, Dip MT

with Grant Watson
NZSP, ADP (OMT), Dip MT, Dip MDT

and Robert Lindsay
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McKENZIE GLOBAL LTD.

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Treat Your Own Shoulder
First Edition Published 2009
1st U.S. edition, A5 Portrait, 2009
McKenzie Global Ltd
info@mckenziemethod.com
www.mckenziemethod.com
Telephone: +64 4 299 7020

© Robin McKenzie CNZM, OBE, FCSP (Hon), FNZSP (Hon), Dip MDT, Dip MT
Grant Watson NZSP, Dip. Phys. (Auckland), ADP (OMT), Dip MT, Dip MDT
Robert Lindsay NZSP, Dip. Phty (Otago), ADP (OMT), Dip MT
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ISBN: 978-0-9799880-8-0
Designed and typeset by Gregory Studio (www.gregorystudio.com)
Copy edited by Caroline Budge
Photography by Daniel Allen (www.danielallen.co.nz)
Illustrations by Jono Smith (www.prolificgraphics.co.nz)
Stock Photography by istockphoto.com
Exclusively distributed by OPTP in the U.S. and Canada - OPTP.com
Printed in the USA

About the Authors and this Book

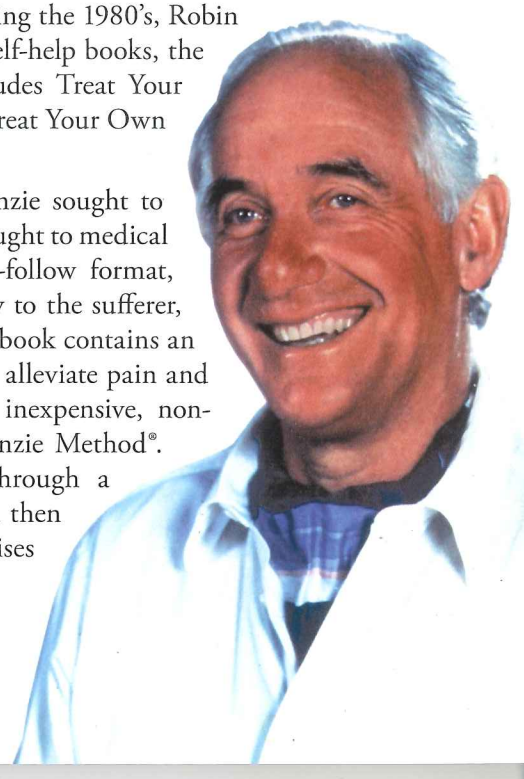
Robin McKenzie

The late Robin McKenzie was born in Auckland, New Zealand, in 1931. He graduated from the New Zealand School of Physiotherapy in 1952 and thereafter specialised in the treatment of spinal disorders.

During the course of the 1960's and 70's McKenzie developed his own specific examination and treatment methods, later known as the McKenzie Method®, for a range of musculoskeletal complaints. Viewed as radical at their inception, the McKenzie Method® of Mechanical Diagnosis and Therapy®, also known as MDT™, has since received international recognition and acclaim and is now taught and practised by medical professionals worldwide. Indeed, in 2004, the Orthopaedic Section of the American Physical Therapists Association voted Robin McKenzie: "the most influential physical therapist or physician, of all time".

Central to the McKenzie Method® is the contention that 'self-management and self- treatment' of most musculoskeletal complaints is more effective, in the long-term, than any other treatment method. In accordance with that contention, during the 1980's, Robin McKenzie began writing a series of self-help books, the Treat Your Own Series, which includes Treat Your Own Back, Treat Your Own Neck, Treat Your Own Shoulder and Treat Your Own Knee.

In the course of these books McKenzie sought to distil the essence of his 'method', as taught to medical professionals globally, in an easy-to-follow format, so that it would be accessible directly to the sufferer, without recourse to a clinician. Each book contains an easy-to-understand treatment plan to alleviate pain and maintain joint health, through the inexpensive, non-invasive and clinically proven McKenzie Method®. Essentially, the reader is guided through a detailed assessment of their pain and then provided with a series of simple exercises to correct and restore their mobility.



The McKenzie Method® has attracted intense interest from researchers all over the world. It is acknowledged that the methods described have helped millions of people worldwide take control of their own pain and postural management, avoid surgery, cure sciatica amongst other complaints, and prevent a long-term costly dependency upon clinicians. Since initial publication the books have been translated into some 18 languages and are consistently global best sellers.

In the process of developing his 'method' for self-treatment, McKenzie also came to realise that correct spinal supports were: "*vital for my patients, if they were to remain pain free*". Initially McKenzie designed a lumbar roll that his wife, Joy, "*made on our kitchen table*", but with numerous patients confirming their efficacy, he then set about designing and developing a specialised range of portable spinal supports, which would cater to different needs. Of detailed and specific design, made of durable, high-quality, materials, The Original McKenzie® range of rolls, complement the exercises in the books, assist in postural management and alleviate pain. They are the only lumbar supports approved for use with the McKenzie Method®. For further information on the books and rolls and how to acquire them, please refer to the website: OPTP.com.

As stated above, Robin McKenzie's ground-breaking work has received accolades from scientific and medical communities around the world. During his lifetime he was awarded numerous Honorary Memberships and Fellowships of international medical associations: "in recognition of distinguished and meritorious service to the art and science of physical therapy, and to the welfare of mankind" (The American Physical Therapy Association). His outstanding contribution was also recognised by Her Majesty Queen Elizabeth II, in the award of an OBE (Officer of the Most Excellent Order of the British Empire) in 1990 followed by a CNZM (Companion of the New Zealand Order of Merit) in 2000.

These extraordinary and wonderful tributes essentially reflect Robin McKenzie's selfless determination to put the patient first and thereby to empower self care.

Grant Watson

Grant Watson is a Senior and International Instructor, and Assistant Director of Education, for the McKenzie Institute International and has represented the Institute extensively in many corners of the world since 1995. He has been actively involved with education within physiotherapy since 1985, and for many years was an Accredited Physiotherapist to the New Zealand Academy of Sport. He is co-author with Robin McKenzie of Treat Your Own Shoulder (2009).

Robert Lindsay

Robert Lindsay is a Physiotherapist in Private Practice in Coromandel Peninsula, New Zealand with post graduate qualifications in orthopaedic and manipulative physiotherapy. He firmly believes in the role of education and self treatment within the scope of physiotherapy, as people generally are able to successfully treat and prevent or limit recurrence of many of the soft tissue disorders that occur in daily life. He is co-author with Robin McKenzie of Treat Your Own Shoulder (2009).

Acknowledgements - First Edition 2009

The authors would like to thank:

Stephen May, Rob Hughes, Ezequiel Gherscovici, Kate Allison, Carole Sweney, Rowley Watson, and Sue Lord for assistance with early drafts of the manuscript. We would also like to thank our models Helen Macdonald, Brian McLean, and Gorman Ngai.

We would like to acknowledge the creative expertise and guidance provided by Rachel Mason at Spinal Publications, and Robbie Burton at Craig Potton Publishing, Nelson, New Zealand.

Finally, we would like to acknowledge the thousands of patients who unknowingly provided most of the solutions for shoulder pain that are described in this book.

Books by Robin McKenzie

Mobilisation of the Spinal Column
Kaltenborn, F.M. Technical translation by McKenzie, R.
Wellington, N.Z.: New Zealand University Press, Price Milburn, 1970.

Treat Your Own Back™ (now in its 9th edition)
McKenzie, R. Waikanae, N.Z.: McKenzie Global Ltd, First published 1980.

Lumbar Spine: Mechanical Diagnosis and Therapy
McKenzie, R. Waikanae, N.Z.: Spinal Publications NZ Ltd, 1981.

Treat Your Own Neck™ (now in its 5th edition)
McKenzie, R. Waikanae, N.Z.: McKenzie Global Ltd, First published 1983.

Cervical and Thoracic Spine: Mechanical Diagnosis and Therapy
McKenzie, R. Waikanae, N.Z.: Spinal Publications NZ Ltd, Published 1990.

Extremities: Mechanical Diagnosis and Therapy
McKenzie, R. and May, S. Waikanae, N.Z.: Spinal Publications NZ Ltd, 2000.

7 Steps to a Pain Free Life
McKenzie, R. and Kubey, C. New York: Plume, 2001.

The Lumbar Spine: Mechanical Diagnosis and Therapy, 2nd ed.
McKenzie, R. and May, S. Waikanae, N.Z.: Spinal Publications NZ Ltd, 2003.

The Cervical and Thoracic Spine: Mechanical Diagnosis and Therapy, 2nd ed.
McKenzie, R. and May, S. Raumati Beach, N.Z.: Spinal Publications NZ Ltd, 2006.

Against the Tide: Back pain treatment – the breakthrough: An Autobiography
McKenzie, R. with Bybee, R. Wellington, N.Z.: Dunmore Publishing, 2009.

Treat Your Own Knee™
McKenzie, R. with Watson G. and Lindsay, R. Raumati Beach, N.Z.: McKenzie Global Ltd. First Published 2012.

Treat Your Own Hip™
McKenzie, R., Watson, G., Lindsay, R. Waikanae, N.Z.: McKenzie Global Ltd, 2019.

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Chapter 1: Introduction

Shoulder problems

At some time during our lives many of us suffer from pain or stiffness in the region of the shoulder, or pain arising from the shoulder that is felt in the upper arm. It is one of the most common problems affecting the joints and muscles after back pain and neck pain.

What's more, these problems frequently persist or recur, with about 50 percent of people still having problems up to a year after the onset of their shoulder pain. The American Academy of Orthopaedic Surgeons reports that more than four million people in the USA seek medical attention each year for shoulder pain, and it accounts for 1.5 million visits to orthopaedic surgeons.

Shoulder problems are often referred to in different ways, including tendonitis, rotator cuff strain or tear, impingement syndrome, frozen shoulder, capsulitis, or arthritis. But even health professionals often have difficulty in identifying a specific source of the pain due to the complex nature of the shoulder and its close involvement with the neck. In many cases, even the use of X-rays, ultrasound scans and MRI scans do not give an exact picture of the site or severity of the injury, or give clear guidance for treatment strategies. In fact, the emphasis is often on labelling the patient's condition, without doing much to resolve it.

The American Academy of Orthopaedic Surgeons reports that more than four million people in the USA seek medical attention each year for shoulder pain, and it accounts for 1.5 million visits to orthopaedic surgeons.

Shoulder pain can be felt in a variety of ways. There can be days or times in the day when no pain is felt. The symptoms may appear for no apparent reason, and just as mysteriously they disappear. At other times the symptoms may only occur with specific movements of the arm such as getting dressed, reaching up into a cupboard, or reaching into the back pocket of your trousers. These aches and pains may also occur constantly – that is, pain to some degree is felt at all times throughout the day. It is also common for shoulder pain to regularly disturb sleep. People who have pain all of the time are frequently forced to take medication and sometimes have to stop work. The pain simply makes their lives miserable, and they have to reduce their activities in order to keep the discomfort at a moderate level. Shoulder problems can thus significantly affect quality of life.

If you have problems of this nature, you may have already discovered that the symptoms can sometimes last for months or even years. You may have found that some treatments can decrease or stop your pain temporarily, but the pain returns later to affect you once again. You may be reading this book because you have persistent pains that have not disappeared, despite the fact that you may have received many types of treatments.

Common treatments for shoulder pain are medication, injections, acupuncture or electrical modalities such as ultrasound, TENS, or interferential therapy. However, while some of these treatments may appear to give short-term benefit, none have strong evidence that they provide effective long-term relief from pain and loss of function.

Many people do not realise that stretching and strengthening your shoulder alone does not automatically give you relief from shoulder pain. "Doing your exercises" is only part of the solution, and what we seldom consider is the positions we hold our arms in the rest of the time.

You may also have been given exercises to perform, and have found these to be of some benefit. However, many people do not realise that stretching and strengthening your shoulder alone does not automatically give you relief from shoulder pain. "Doing your exercises" is only part of the solution, and what we seldom consider are the positions we hold our arms in the rest of the time.

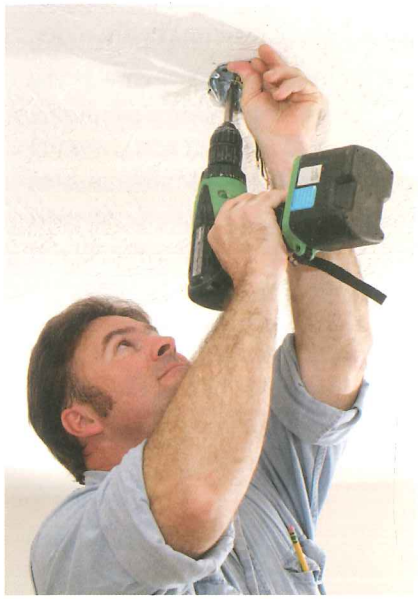


Photo 1

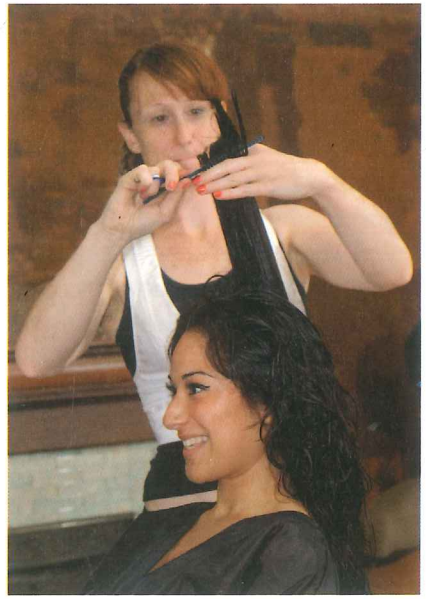


Photo 2

It is important to realise that the way you move your arm and the sustained raised arm position or postures you adopt during manual occupations such as building (Photo 1) or hairdressing (Photo 2) can significantly contribute to your shoulder problem.



Photo 3

Similarly, it is common for people in sedentary occupations, for example office work, to report shoulder pain related to static raised arm postures such as sitting at a computer (Photo 3). Activities such as driving (Photo 4), and even some sleeping postures with the arms raised (Photo 5), also place a prolonged static load on the shoulder.

Whatever the situation, you have most likely realised that many of the treatments dispensed by doctors, physical therapists and chiropractors are prescribed for your present symptoms and are not directed at preventing future problems. Time and again you may have to seek assistance to get relief from your shoulder pain. Imagine how good it would be if you were able to apply treatment to yourself whenever pain arose. Better still, imagine how good it would be if you were able to apply a system of treatment to yourself that would prevent or reduce the onset of pain.



Photo 4

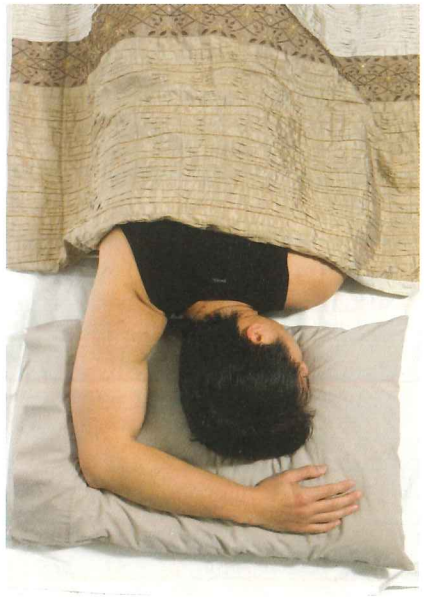


Photo 5

It has been shown repeatedly that people require a rational explanation for their problems. They need education in the postures, activities, and exercises that allow them to remain free of disabling symptoms. They need advice on how to avoid the detrimental forces encountered in daily living and how to apply beneficial strategies. All of these things are found in this book.

Since the 1970s, methods have been discovered that enable people to understand how to manage their own spinal and extremity problems. The self-treatment methods that we describe to you here evolved after Robin McKenzie's experiences with more than 20,000 patients during 40 years of practice. The methods have been used for back and neck pain by doctors and physical therapists in many parts of the world for decades. Millions of people like you have also found relief by reading the two previous books in this series – Treat Your Own Back (1980) and Treat Your Own Neck (1983). Current editions of both these books are still readily available*. More recently this same McKenzie approach has been used for mechanical pain in other regions of the body such as the shoulder, and the majority of patients are achieving the same very satisfactory results.

One of the main points of this book is that the management of your shoulder problem is your responsibility. If, for some reason or other, you have developed shoulder problems, then you must learn how to deal with the present symptoms and how to prevent or limit future problems. Self-treatment will be more effective in the long-term management of your shoulder pain than any other form of treatment because you can self-treat multiple times a day. It is the least expensive treatment and safer than receiving treatment from other people. Self management gives you the tools to stay better.

The self-treatment methods that we describe to you here evolved after Robin McKenzie's experiences with more than 20,000 patients during 40 years of practice.

* For details please refer to the website: OPTP.com

Is the information in this book suitable for me?

The majority of people will benefit from the advice given in this book which is designed for those people with straightforward recurring mechanical problems. Nearly everyone can commence the exercise programme, provided the recommended precautions are taken as described later in this chapter.

However, in any of the following situations you should not commence the exercise programme without first consulting your doctor or physical therapist.

- If you have associated neck or upper back pain (see Diagnosing Your Problem below).
- If you have severe pain in the arm below the elbow and experience sensations of weakness, numbness, or pins and needles in the hand and fingers.
- If you have suddenly developed shoulder problems following a recent severe accident such as a heavy fall onto an outstretched arm resulting in a major loss of movement, or visible bruising.
- If you are generally feeling unwell in conjunction with your shoulder pain.
- If you have a previous history of cancer or a tumour.
- If you develop chest pain with activity or have a history of cardiac or heart problems.
- If you have had shoulder surgery in the past six months.
- If you have a history of repeated dislocation of your shoulder, or have dislocated it recently.

If you have developed shoulder pain for the **first** time you must follow the instructions and guidelines over the next several pages even more carefully. If you have any doubt about your suitability for this programme, we recommend you consult your doctor or physical therapist for advice and treatment, and instructions on the prevention of further shoulder problems.

Choose your therapist carefully. You should be provided with the information and education you require to manage your own problem. Every patient deserves to have the opportunity to learn how to manage their own shoulder problem, and every therapist should be obligated to provide that information. This is the essence of the **McKenzie Method**.

The only health care professionals fully qualified to provide the McKenzie Method are members of the McKenzie Institute International who hold the credentialling certificate or the Diploma in Mechanical Diagnosis & Therapy®. To obtain names of these treatment providers in your area please refer to the website **www.mckenziemethod.com.**

We recommend you carefully follow the guidelines and instructions in the rest of this chapter to assess your suitability for this programme, or to establish whether you should consult a health professional first. The information provided will enable you to determine with reasonable certainty whether your shoulder is the source of your pain, and if you will benefit from the methods outlined in this book.

Once you have started the exercises, carefully watch your pain pattern. If your pains are getting progressively worse and remain worse the following day, or if they are slowly increasing in severity and becoming intolerable, you should seek advice from your doctor or a McKenzie Institute International credentialled or diplomaed clinician.

We recommend you carefully follow the guidelines and instructions in the rest of this chapter to assess your suitability for this programme, or to establish whether you should consult a health professional first.

Diagnosing your problem

The role of the neck in shoulder pain

The shoulder has a close relationship with the neck or cervical region of the spine, and sometimes the pain and loss of movement we feel in our shoulder is actually coming from a problem in our neck. Therefore with all shoulder problems it is important to attempt to exclude the neck as the source of the pain.

Is my pain coming from my neck or my shoulder?

The two most reliable indicators to determine whether the pain is coming from structures in the neck or the shoulder are:

1. Pain location
2. Pain behaviour

Pain Location

The sites of pain caused by both shoulder or neck problems can be similar in some cases. Pain originating from the shoulder is usually felt on the front or outer part of the shoulder and commonly in the upper third of the arm (Figure 1). It may radiate down to the elbow and in severe cases you may occasionally feel a dull ache as far down your arm as the wrist (Figure 2). Affected shoulder structures do not usually cause pain to be felt above the shoulder or into the neck. Therefore, if pain is felt between the point of the shoulder and the neck, or in the region of the shoulder blade, it is unlikely to be coming from the shoulder. A shoulder problem will not give you a sensation of pins and needles, or numbness, in the hand.

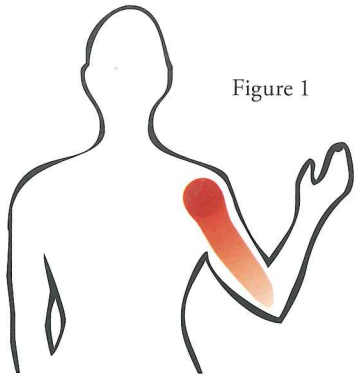


Figure 1

On the other hand, pain originating from structures in the neck will generally cause some pain or aching at or near the base of the neck or into the shoulder blade (Figure 3). However, the most pain may also be felt between the neck and shoulder. It may spread into the shoulder and upper arm, and extend below the elbow to the wrist or hand (Figure 4). Pain from a neck problem may also be associated with a sensation of pins and needles or numbness.



Figure 2

Pain Behaviour

Shoulder pain, in most cases, is produced or aggravated by moving the shoulder and arm – particularly lifting your arm to the front or side, or putting your hand behind your back. On the other hand, shoulder pain originating from the neck is frequently altered by neck positions or movements.

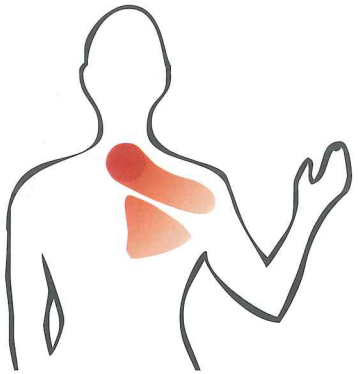


Figure 3

To determine whether neck movements affect your shoulder and arm pain, we recommend that you perform the following test movements, carefully noting any change in your pain location and intensity.

If these neck movements have no effect on your shoulder or arm pain it is probable that the shoulder is the source of your pain. However, if these neck movements either produce, or alter the intensity or location of your shoulder pain, the source of your pain may be the structures in your neck, and the information in the Treat Your Own Neck book may be of more relevance to you.

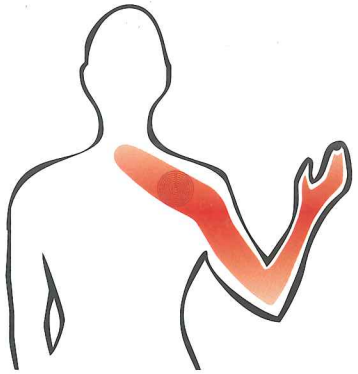


Figure 4

1. Retraction and Extension

As your starting position, sit or stand upright with both arms relaxed by your side. Take careful note of where you have been feeling your pain. Retract your neck (Photo 6) and slowly lift your chin upwards as if looking at the sky (Photo 7). Hold for 1–2 seconds, then slowly lower it again and return to the starting position. Repeat this action of retraction with extension ten times.



Photo: 6

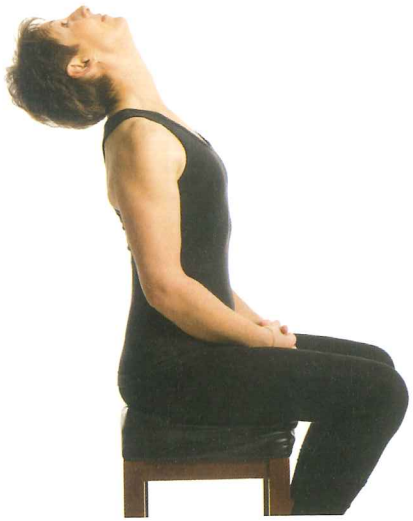


Photo: 7

If you are still in doubt you may test your neck movements in side bending and rotation by following these instructions:

2. Side Bending

Make sure you are still sitting or standing upright with both arms relaxed by your side, taking note again of where you have been feeling your pain. This time, slowly side bend your neck towards your painful shoulder (Photo 8). Hold for 1–2 seconds, then slowly return to the starting position. Repeat this action ten times, and re-assess your pain. Now repeat this movement ten times to the non-painful side (Photo 9).



Photo 8



Photo 9

3. Rotation

From the upright sitting or standing position as above, take note again of where you have been feeling your pain. Slowly turn your head towards the painful shoulder (Photo 10). Hold for 1–2 seconds, then slowly return to the starting position. Repeat this action ten times, and re-assess your pain. Now repeat this action ten times to the non-painful side (Photo 11).

If these neck movements have no effect on your shoulder or arm pain it is probable that the shoulder is the source of your pain. However, if any of these repeated movements of your neck appear to either produce, or alter the intensity or location of your shoulder pain, the source of the pain is probably the structures in your neck. Therefore, we recommend that you read Treat Your Own Neck as previously described. If you still have any doubt as to whether your neck is affecting your shoulder pain you can perform the test movements again. But this time, rather than standing or sitting with your arm relaxed by your side, raise your arm into a painful position, and repeat the sequence of movements as above, starting with the retraction in Photo 6. Relax your arm between the sequences of test movements, then return to the painful position as you attempt the next movement.



Photo 10



Photo 11

Who can perform self-treatment?

Having determined that your shoulder region is the source of your pain, we recommend you spend a further couple of minutes completing the following checklist. Answering all the questions will help you to determine whether you can treat your shoulder problem successfully without further assistance:

Yes	No	
☐	☐	1. Are there periods in the day when you have no pain? Even ten minutes?
☐	☐	2. Do you only have pain when you move your arm and shoulder?
☐	☐	3. Are you generally better with your arm at your side or supported across your body?
☐	☐	4. Are you generally worse during or after prolonged periods of holding your arms in a raised position such as welding, driving, hedge trimming, or painting?
☐	☐	5. Is your pain produced or made worse when you lie on your affected shoulder?
☐	☐	6. Is the pain confined to areas above the elbow?
☐	☐	7. If you have pain in the upper or lower arm does it sometimes stop completely even though you may still have pain in the shoulder?
☐	☐	8. Have you had several episodes of shoulder pain over the past months or years?
☐	☐	9. Between episodes, is your shoulder pain-free?
☐	☐	10. Between episodes, are you able to move your arm freely in all directions without pain?

If you answered:

'Yes' to all of the questions on the previous page you are an ideal candidate for the self-treatment outlined in this book.

'Yes' to five or more questions, your chances to benefit from self-treatment are good and you should commence the programme.

'Yes' to only four or fewer questions then some form of specialised treatment may be required and you should consult a therapist credentialed or diplomaed by the McKenzie Institute International. To obtain names of these treatment providers in your area please refer to the website: www.mckenziemethod.com.

This book describes a complete system of management, which must be followed in its **entirety** to ensure success. Do not turn straight to the exercise description pages; your understanding of chapters one to four is **essential**.

Chapter 2: Understanding The Shoulder and Neck Region

The shoulder

Let us look at the shoulder region. The shoulder joint consists of a ball and socket joint between the long arm bone, the humerus, and the shoulder blade known as the scapula. The shoulder joint itself is surrounded by a sack-like structure called a capsule to provide stability. In front of the shoulder region is the collar bone, the clavicle, which links the chest to the outer aspect of the scapula. This small joint between the scapula and clavicle is known as the acromioclavicular joint, commonly called the AC joint. Collectively the humerus, clavicle, and scapula, which are held in place by ligaments, are called the shoulder girdle and are attached largely by muscles to the neck, upper back, and rib cage (Figure 5, overpage).

For further support and movement the shoulder joint relies on a small group of muscles that are collectively known as the rotator cuff. They begin on the scapula and are attached to the top of the humerus by cord-like tissue called tendons. When a rotator cuff muscle contracts it causes the tendon to tense and movement to occur at the shoulder joint (Figure 6, overpage).

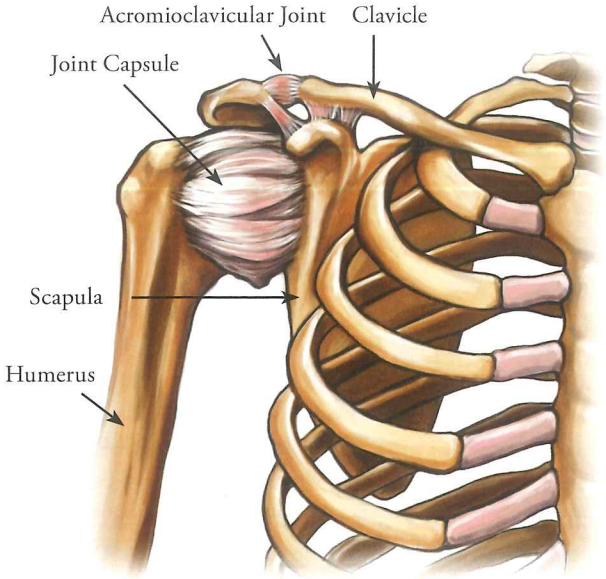


Figure 5

Collectively the humerus, clavicle, and scapula, which are held in place by ligaments, are called the shoulder girdle and are attached largely by muscle to the neck, upper back, and rib cage.

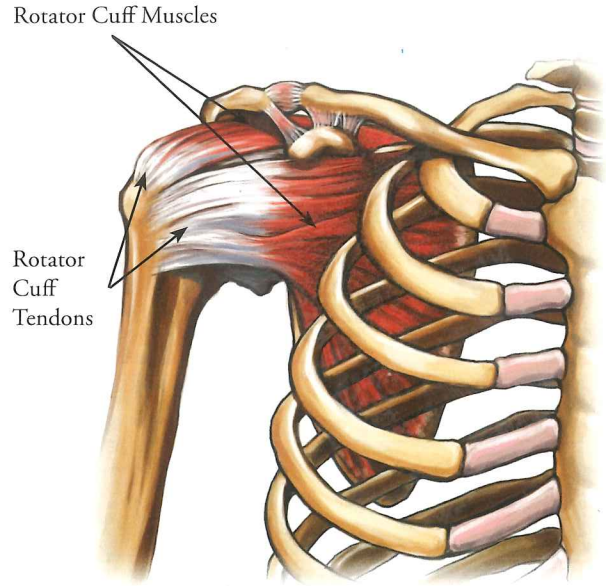


Figure 6

For further support and movement the shoulder joint relies on a small group of muscles that are collectively known as the rotator cuff.



Photo 12



Photo 13

Functions of the shoulder region

The shoulder girdle is a series of joints of which the shoulder joint is the most flexible. It is the most mobile joint in the body and allows positioning of the hand to perform a range of functional tasks. We are able to reach above our head (Photo 12), across our body (Photo 13), and behind our back (Photo 14) in almost 180 degrees of motion.

The design of the shoulder also allows strength and power for the performance of heavy physical tasks such as lifting and carrying when our arms are close to the side of the body (Photo 15).



Photo 14



Photo 15

However, this strength and power is reduced during activities involving reaching and stretching away from the body or above the head. This flexibility of the shoulder, combined with its requirements for strength and power, makes it vulnerable to strains and overstretching from raised arm or reaching activities. If we lose this wide range of painless motion through the development of a painful shoulder it quickly impacts on our daily life, and can affect everyday tasks such as dressing, and work or recreational activities.

Mechanical pain

Pain of mechanical origin occurs when a pain-sensitive structure has been placed in a position that overstretches, overloads, or compresses the surrounding ligaments, tendons and other soft tissues. This is true for mechanical pain in any region of the body, including the shoulder. To help you understand how easily some mechanical pains can be produced, you may like to try a simple experiment.

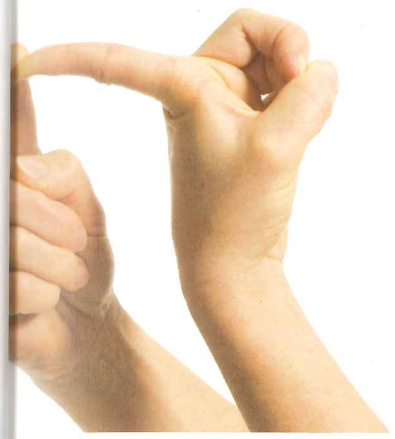


Photo 16

First, bend one finger backward until you feel a strain, as shown in Photo 16.

If you keep your finger in this position, you initially feel only minor discomfort, but as time passes, pain eventually develops. In some cases, pain caused by prolonged stretching may take as much as an hour to appear. Try the experiment once more, but now keep bending the finger past the point of strain until you feel the immediate sensation of pain. You have overstretched, and your pain warning system is telling you that to continue movement in that particular direction will cause damage. The pain warning tells you to stop overstretching to avoid damage and, when you do so, the pain ceases immediately. No damage has occurred and the pain has gone. No lasting problems arise from this short-lived strain providing you take note of the pain warning system.

If you fail to heed the warning and keep the finger in the overstretched position, the ligaments and surrounding soft tissues that hold the joint together will eventually overstretch and tear. This tearing will result in an ache that continues even when you stop overstretching. The pain reduces in intensity but continues even when the finger is at rest. The pain increases with movement performed in the wrong direction and will not cease until some healing has occurred. Healing may take several days, but would be prolonged if every day you were to continue to apply the same strains to the finger. The same things happen when you overstretch the structures in and around your shoulder.

If you fail to heed the warning and keep the finger in the overstretched position, the ligaments and surrounding soft tissues that hold the joint together will eventually overstretch and tear.

Mechanical shoulder pain

The shoulder capsule ligaments and the rotator cuff tendons, and other soft tissues that hold the shoulder together, can simply be overstretched, overloaded, or compressed without further damage as in the bent finger example above. Overstretching may also be caused by a force placing a sudden severe strain on the shoulder, for example mis-hitting a golf shot (Photo 17), starting a lawn mower (Photo 18), or a fall onto the shoulder, elbow or hand (Photo 19). This type of stress cannot easily be avoided as it occurs unexpectedly.

However, more often overstretching or overloading is caused by postural stresses that place less severe strains on the shoulder over a longer time period, for example performing work or activities with either repeated or sustained raised arm or overhead arm positions such as pruning, house painting, or swimming (Photos 20–22). By understanding the potential for injury in repeatedly performing these actions or sustaining the arms raised posture for prolonged periods of time, you can learn to minimise these adverse loads on your shoulders. Herein lies one of your main responsibilities in the self-treatment and prevention of shoulder pain.



'hoto 17



Photo 18



Photo 19



Photo 20



Photo 21

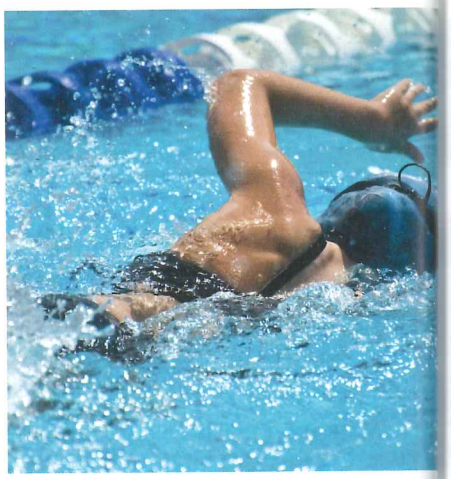


Photo 22

Tissue damage

Complications arise when overstretching or overloading of soft tissues around the shoulder leads to actual tissue damage. It is often thought that shoulder pain is caused by strained muscles. This is not the case. Muscles, which are the source of power and movement, can be overstretched but usually heal rapidly and seldom cause pain lasting for more than a week or two. The real problem is the shoulder joint and rotator cuff tendons which are readily injured from overstretching or overloading.

These damaged structures undergo a healing process that may result in an incomplete repair, and become less elastic and weakened. Once soft tissues are damaged, pain is felt until healing is complete and function is fully restored. We used to believe this pain was caused by chronic inflammation of these structures, and treatment was aimed at decreasing this 'inflammation' with medication, injections or electrotherapy. However, we now understand that the solution for these pain sensitive structures is to remodel the tissue by gradually applying progressive forces. Unless appropriate exercises are performed to gradually stretch and strengthen these structures and restore their normal flexibility and strength, they may become a continuous source of shoulder pain.

It is also important that during this repair phase you avoid movements or sustained arm positions that disrupt the recovery process. The failure of the tissues to fully recover will result in ongoing pain and a loss of shoulder movement in some directions along with a reduced ability to return to your usual work or daily activities.

Chapter 3: Common causes of shoulder pain

As mentioned in chapter 2, there are two main structures within the shoulder region that give rise to shoulder pain – the capsule and ligaments of the shoulder joint itself, and the surrounding rotator cuff tendons. These structures may be injured, and sometimes even torn, when we wrench our shoulder performing a forceful lifting or pulling action, for example pulling a plant out of the ground (Photo 23), lifting a suitcase (Photo 24), or from a fall onto the shoulder, elbow, or hand (Photo 25).



Photo 23



Photo 24

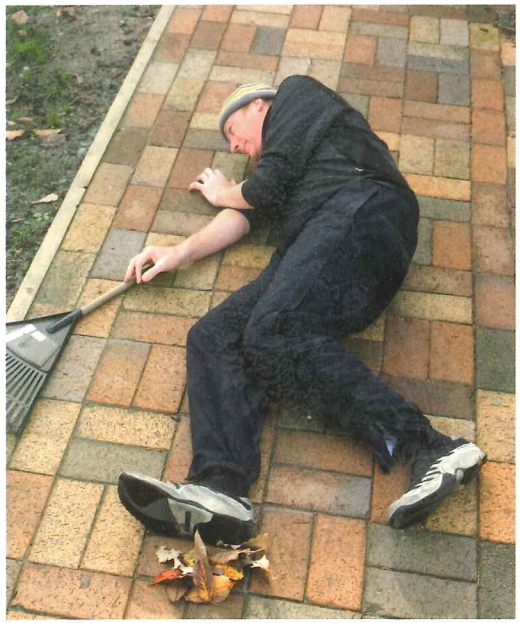


Photo 25

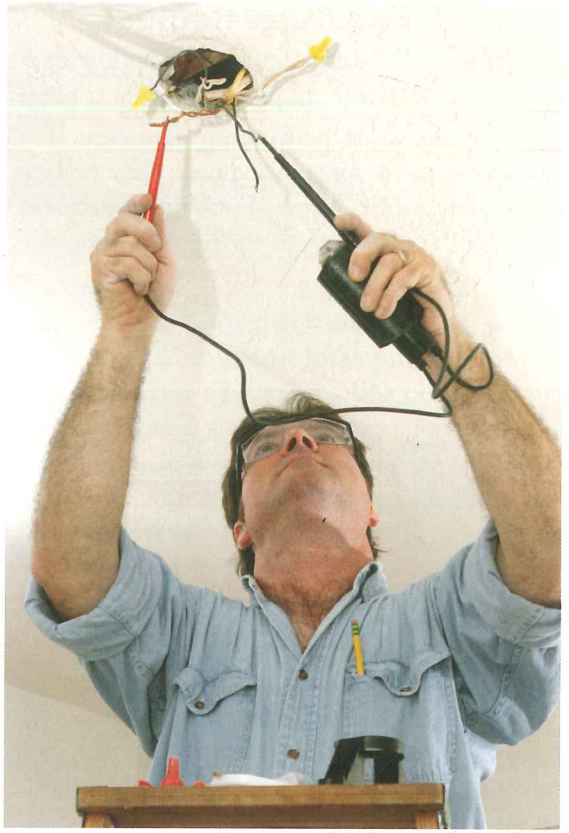


Photo 26

However, a specific injury or incident as above is not the most common cause of developing and prolonging shoulder pain. Overstretching or overloading the shoulder region due to positional stresses can be just as damaging. These stresses arise from prolonged or repeated raised arm activities which are performed while either standing or sitting, for example undertaking intensive physical activity such as overhead building work (Photo 26), or writing on a board (Photo 27).



Photo 27

Consequences of postural neglect

Unfortunately many of us spend much of our work and leisure time in a slouched position with the shoulders rounded or holding our arms in raised arm postures while performing activities. If you continue with these poor postures for long periods at a time and never regularly correct your slouched posture, or take breaks from raised arm activities, you eventually lose the ability to bring the shoulders back into good alignment.

When these poor postures are maintained long enough, they cause overstretching or overloading of the structures in and around the shoulder. Thus, to begin with, pain will arise only in certain prolonged positions. However, once the poor postures become a habit and are maintained most of the time, movements of the arm as well as positions will produce pain. Shoulder problems developed in this way are the consequence of postural neglect. Poor shoulder and arm posture is not the only cause of shoulder pain. However, once shoulder problems have developed, poor posture will frequently make them worse and perpetuate them.

Some people who habitually adopt poor shoulder and arm postures, and remain unaware of the underlying cause, experience shoulder pain throughout their lifetime simply because they are not in possession of the necessary information to correct the postural faults.

When pains of postural origin are first felt they are easily eliminated merely by correcting the postures. However, as time passes, these uncorrected habitual shoulder or raised arm postures cause changes to the structures of the shoulder. Excessive wear occurs, with loss of elasticity resulting in degenerative changes to the rotator cuff and other structures in and around the shoulder. The effects of poor posture in the long term, therefore, can be just as severe and harmful as the effects of injury.

The key things to learn:

- Sit and stand correctly.
- Interrupt the rounded neck and shoulder postures at regular intervals.

Try this simple test:

Sit in a slouched position with rounded shoulders (Photo 28) and try and lift your arms above your head (Photo 29). Hold for a few seconds and then lower them.

Next sit up straight with upright posture (Photo 30) and lift your arms again for a few seconds (Photo 31).



Photo 28



Photo 29

Did you notice the difference? It is generally more difficult to lift the arms when you are slouched, as the shoulders are working at a mechanical disadvantage.



Photo 30



Photo 31



Photo 32



Photo 33

Now, try the same test while standing. Stand in a slouched position with rounded shoulders (Photo 32) and try and lift your arms above your head (Photo 33). Hold for a few seconds and then lower them.

Next stand up straight with upright posture (Photo 34) and lift your arms again for a few seconds (Photo 35).

The main theme of this chapter is that pain of postural origin will not occur if you avoid prolonged overstretching or overloading of your shoulder. Should pain develop, there are certain movements or posture modifications you can perform in order to stop that pain. You should not have to seek assistance whenever postural pain arises.



Photo 34



Photo 35

Again, did you notice the difference? More effort is required, you have a smaller range of motion, and the muscles fatigue more quickly in a slouched standing position. But these slouched postures are exactly the position from which we move our arms and shoulders much of the time without recognising the role of poor posture in the onset and persistence of shoulder pain as discussed above. Furthermore, particularly in our sedentary lifestyles, we seldom put our shoulders through a full range of motion. As a result they gradually lose their flexibility and the surrounding muscles lose their strength. These factors contribute to making us more prone to injury when we attempt a sudden lift or work with our arms above the level of our shoulders.

Postural stresses

The common postures and prolonged positions we adopt that affect the shoulder structures are primarily a combination of these three factors:

1. Performing repetitive or prolonged tasks with raised arm postures such as welding or driving, and activities with our arms above shoulder height.
2. Sitting or standing still in a slouched posture. The adverse effect of raised arm postures is increased if these activities are performed in slouched postural positions.
3. Lying and sleeping.

Raised arm postures

Performing raised arm or overhead activities for prolonged periods of time (Photos 36 and 37), or an increase in the frequency or duration of such activities, is a major contributing factor to causing and perpetuating shoulder pain. These raised arm or overhead activities place repeated or prolonged postural stresses on the structures of the shoulder.

Sitting and standing for prolonged periods

When we are moving about, especially when walking briskly and swinging the arms, we assume a fairly upright posture. The shoulder girdle is held directly over the vertebral column and consequently receives the maximum support possible. For most of us, however, sitting or standing for prolonged periods results in poor posture. When we stand for long periods (Photo 38) or sit and relax in a chair (Photo 39) the head slowly protrudes forwards and the shoulder girdle becomes rounded because the supporting muscles become fatigued.

Raised arm or overhead activities place repeated or prolonged postural stresses on the structures of the shoulder.



Photo 36

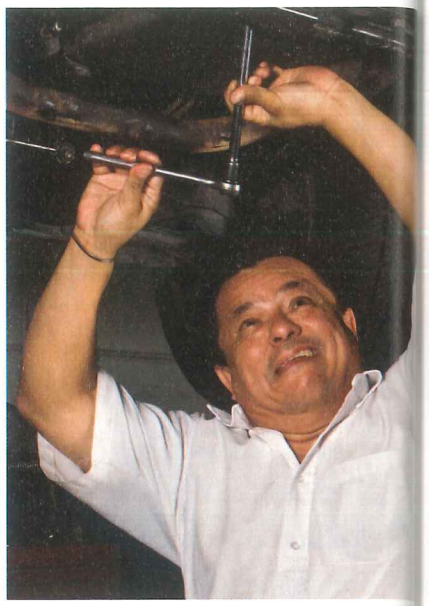


Photo 37

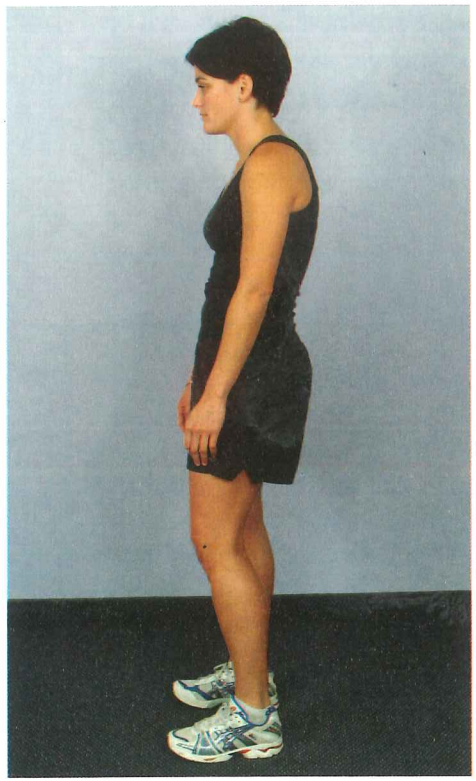


Photo 38



Photo 39

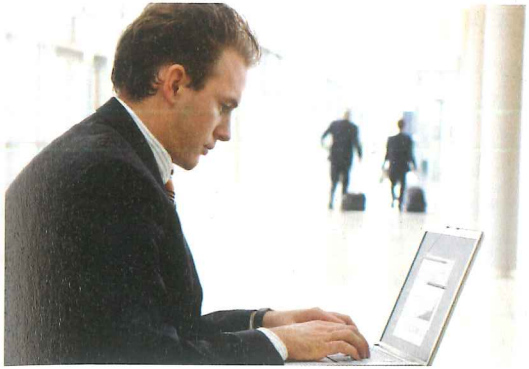


Photo 40

As these muscles fatigue, they no longer hold us upright, and so we lose the main support for good shoulder posture. If we then perform raised arm activities from this poor posture, this further increases the load on the shoulder structures. Many of us spend increasing amounts of time at work or leisure in slouched postures, for example in front of a computer (Photo 40), with an arm outstretched. Commonly our standing postures are just as harmful, for example welding (Photo 41).



Photo 41

Lying and sleeping

If you wake up in the morning with a stiff and painful shoulder that was not causing problems the night before, or your shoulder pain wakes you consistently during the night, it is likely that there is something wrong with the position in which you sleep or the support available for your shoulder.

If you are lying in a position that is placing an adverse stress on your shoulder by either lying on it (Photo 42), leaving your shoulder unsupported (Photo 43) or lying in a raised arm posture (Photo 44), a gradual overstretching or overloading of the painful structures occurs. Thus poor sleeping postures can further aggravate an already painful shoulder.



Photo 42



Photo 43



Photo 44

Poor sleeping postures can further aggravate an already painful shoulder.



Photo 45



Photo 46

Environmental factors

In order to successfully treat shoulder pain it is necessary to be educated on which arm or shoulder positions and activities aggravate and perpetuate your shoulder pain, and learn the correct positions and ways to perform activities that will enable you to relieve your shoulder pain and regain your function. As discussed, it is occupations or activities that have our arms raised in static positions, or performing repetitive overhead activities, that gradually result in overloading, overstretching, or compressing of the shoulder structures (Photos 45, 46 and 47).

These so-called 'gradual process' or 'overuse' conditions often begin as a minor irritation felt in the shoulder region. This is at first eased temporarily by changing the position of the arm or shoulder and therefore is often ignored. However, if you continue to apply these overloading activities the affected structures have no chance to recover and gradually weaken to the point that even minor strains cause pain. When this occurs your condition becomes long-standing, and pain becomes persistent. There are several factors that result in, or aggravate, shoulder pain that we need to consider:

- An increase in an activity such as increased work hours in an occupation with raised arm or repetitive work actions.
- Commencing an activity that is either new or has not been performed for a period of time. This increased load on the shoulder has occurred too rapidly for the structures of the shoulder to tolerate and adapt.
- Performing activities that have our arms held in raised positions for prolonged periods or performing repeated movements away from our bodies or above shoulder height. Sustaining these positions places an adverse load on the structures of the shoulder.

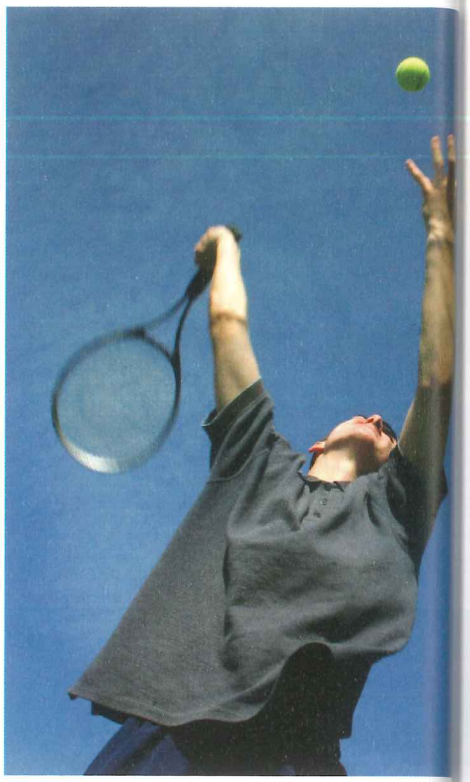


Photo 47

- Using inappropriate equipment, for example attempting to trim a hedge with blunt shears.
- Working in a confined or restricted space, resulting in us adopting inappropriate or uncomfortable positions of our arms and shoulders in order to perform the tasks.

Over a period of hours, days, or weeks, one or several of these above factors can have a cumulative effect on the structures of our shoulder resulting in shoulder pain developing.



Photo 48 - Incorrect



Photo 49 - Correct



Photo 50 - Incorrect

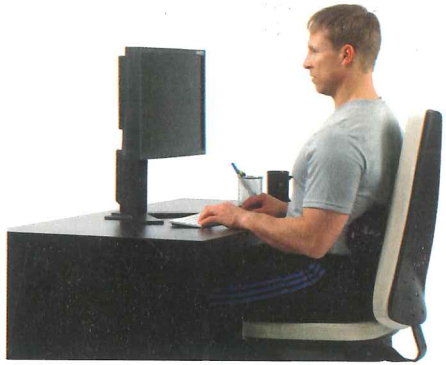


Photo 51 - Correct

How to manage prolonged or repeated use of the raised arm positions

It is necessary to avoid or limit activities which have our arms raised in front, to the side, or above our shoulder or head as these are positions where the structures of the shoulder are in their weakest position and most vulnerable to becoming painful or injured (Photos 48, 50 and 52). Always adopt positions where your arms or elbows are close to your body – either by your side or just in front of you (Photos 49 and 51), and if performing a heavy task such as drilling (Photo 53) use both arms, as this is the position of strength and stability for the structures of the shoulder and will decrease, minimise or prevent the onset of shoulder pain.

If you are unable to avoid prolonged raised arm activities, or are about to commence a raised arm activity that you do infrequently, perform the activity for a short period of time. Then stop the activity just as you are feeling some discomfort in your shoulder region and have a pause for thirty seconds or so. This will allow the structures of your shoulder to recover, and enable you to develop the habit of appropriately pacing your activities.



Photo 52 - Incorrect



Photo 53 - Corr

You can also use this time to perform this simple stretch:

Stand upright (Photo 54), clasp your hands behind your back (Photo 55) and pull your shoulders and arms backwards as if trying to pull the shoulder blades together (Photo 56). Hold for three seconds and repeat 3–5 times.

Regularly varying your daily tasks, or taking a 30-second break every ten minutes from these potentially harmful activities, will minimise the chances of developing or aggravating a shoulder problem.



Photo 54



Photo 55



Photo 56

Working in awkward positions or cramped spaces

Some tasks can only be performed in positions that are likely to cause overstretching or overloading of the shoulder. They may have to be performed in cramped spaces or with head and shoulder in awkward static positions, particularly if the arms are above the level of the shoulders (Photo 57).

Under these circumstances you may not be able to prevent the onset of shoulder pain just by regularly assuming the correct arm posture, taking regular rests, or performing the pain-relieving exercise. If your shoulder problems are brought on in this way you must frequently interrupt these adverse postures by taking a 30-second break **every few minutes** and perform the stretch as just described - Photos 54, 55 and 56. It is also necessary to perform this type of task for a limited time then either take a prolonged rest or change activity to avoid injury to your shoulder.

When working in awkward positions you must frequently interrupt these adverse postures by taking a 30-second break every few minutes.



Photo 57

How to manage prolonged sitting or standing

You may have been sitting slouched for many years without shoulder pain. However, once you have developed shoulder problems you must no longer sit in the old way, because this posture will only continue the overloading discussed previously. Very commonly, while sitting, you will have insufficient support for your low back, neck, and shoulders, and you will continue to place strains on these areas when you are at a computer, reading or relaxing. If your shoulder problems are aggravated by reading, computer use, or watching television, the posture that you have adopted is the cause of the pain, and this posture depends to a large extent on the type of chair or support you use.

During sitting, the position of the low back strongly influences the posture of the neck and shoulder area. Therefore it is necessary to first correct the posture of your low back. How to assume and maintain the correct posture of the low back when sitting is fully described in the books Treat Your Own Back and Treat Your Own Neck. However, for the purposes of this book, you must be fully aware of the following:

If the low back is allowed to slouch, it is impossible to sit with head and shoulders pulled backwards (Photo 58).

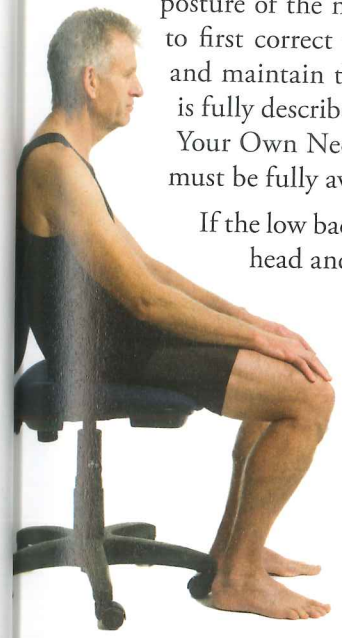


Photo 58

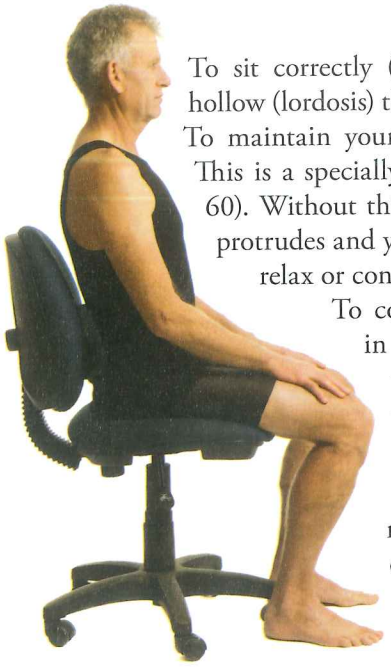


Photo 59

To sit correctly (Photo 59), you must maintain the natural hollow (lordosis) that is present in your low back while standing. To maintain your lordosis it is helpful to use a lumbar roll. This is a specially designed support for your low back (Photo 60). Without this support your low back slouches, your head protrudes and your shoulders become rounded as soon as you relax or concentrate on anything other than your posture. To counteract this slouching, place a lumbar roll in the small of your back, about waist level, whenever you are sitting.

When first commencing the above procedures to correct your low back, neck and shoulder posture in sitting, you will experience some new pains. These may be different from your original pain and may be felt in another place. New pains are the result of performing new exercises and maintaining new positions. They should be expected and will wear off in a few days, provided postural correction is continued on a regular basis. Once you have become used to sitting correctly, you will enjoy it. You will soon notice the reduction or absence of pain and the increased comfort. From then on you will automatically choose chairs that allow you to sit more correctly.



Photo 60

The sale of The Original McKenzie® range of spinal supports provides funding for research into improved methods of treatment for musculoskeletal disorders and to provide relevant education for both health care professionals and patients. These spinal supports are available worldwide from distributors detailed on the website www.mckenziemethod.com

Correction of standing posture is similar to that when sitting in that generally we need to move from a slouched position to a more upright stance (Photo 54). However, as well as standing erect you may also clasp your hands behind your back (Photo 55) and pull your shoulders backwards as if trying to pull the shoulder blades together (Photo 56). Sustain this position for a few seconds and repeat three or four times. This can also be performed while you are walking.

Remember. In order to prevent the development of shoulder pain:

- Adjust your environment and posture to enable you to have your arms in the correct position with elbows close to your body for as much of the time as possible.
- Interrupt sustained raised arm positions.
- Vary or rotate tasks at regular intervals to prevent pain caused by prolonged load on specific structures.
- Learn to sit and stand upright, and to sleep with the neck and shoulder region well supported.

How to manage lying down and sleeping

There are two things to consider with shoulder pain that arises from lying or sleeping.

If you lie on your painful shoulder this will place a compressive load on the area and often can only be tolerated for a short period of time before you have to change position. The best solution for postural pain that disturbs your sleep when lying on the painful side is to train yourself not to lie on that side for any length of time.

Another common solution is to take some of the load off the painful shoulder by correcting the sleeping surface. Try using a larger, or an additional, more supportive pillow while maintaining normal alignment of the neck (Photo 61). If this does not provide relief it is recommended you either sleep on your back with a pillow under your shoulder (Photo 62) to provide support, or sleep on your non painful side as discussed.



Photo 61

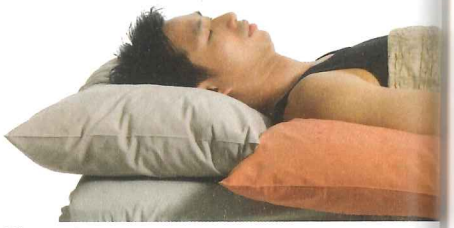


Photo 62



Photo 63



Photo 64

'Frozen' shoulder

One relatively common and frustrating source of shoulder pain is called a 'frozen shoulder' or a capsulitis. This is a condition where movement of the shoulder in all directions (Photos 63, 64, 65 and 66) becomes both painful and increasingly stiff.

The condition frequently affects people over the age of 40 and may come on for no apparent reason, and sometimes develops following an injury to the shoulder, wrist or hand such as a severe sprain or fracture. Middle-aged women and diabetics seem to have a higher incidence of this condition, although the reasons for this are unclear.



Photo 65



Photo 66

A frozen shoulder is frequently described as going through three stages:

1. The first stage is when the shoulder becomes increasingly more painful during the day and begins to disturb sleep, but remains reasonably mobile.
2. The second stage sees the shoulder become increasingly stiff and painful, often severely restricting the performance of activities at work and daily life, and disturbing sleep. Attempting to exercise the arm to prevent this stiffness occurring may be very painful.

3. The third stage sees the shoulder gradually become less and less painful but remains stiff until gradually it regains most, or all, of its previously lost mobility. Exercises are frequently successful during this stage in assisting the restoration of movement to the shoulder.

Each stage may take three months or longer and the whole process from onset to resolution of the condition may take a frustrating 12 to 18 months or longer.

Chapter 6 (page 88) will explain how to determine if your frozen shoulder will benefit from the treatment described in this book.

The information regarding posture is still an important component in minimising your shoulder pain during this process.

Each stage may take three months or longer and the whole process from onset to resolution of the condition may take a frustrating 12 to 18 months or longer.

Chapter 4: Understanding the McKenzie Method®

Your understanding of this chapter is essential for successful self-treatment. **Please read it carefully.**

The aim of the exercises

The purpose of the exercises is to abolish pain and, where appropriate, to restore normal function – that is, to regain full mobility in the shoulder or as much movement as possible under the given circumstances.

When you are exercising for **pain relief**, you should move to the edge of the pain or **just into** the pain, then release the pressure and return to the starting position. As you release the stretch, the pain must diminish back to the starting level or less. If it does **not**, you are overdoing it. Use less force. When you are exercising for **stiffness**, the exercises can be made more effective by firmly and steadily applying **overpressure** (as described in Chapter 5) in order to obtain the maximum amount of movement. Postural correction and maintenance of the correct posture should **always** occur during and following the exercises. Once you no longer have shoulder pain, ongoing good postural habits are **essential** to prevent the recurrence of shoulder problems.

Effect on pain intensity and location

There are three main effects to look for while performing the exercises:

1. They may cause the symptoms to disappear.
2. They may cause an increase or decrease in the intensity of the pain that you experience.
3. They may cause the pain to move from where you usually feel it to some other location.

The effects of exercise on intensity or location of pain can sometimes be very rapid. It is possible to reduce the intensity or change the location of pain after completing as few as ten or fifteen movements, and in some conditions the pain can completely disappear. However, in other cases this improvement may be noticed over several days or up to a few weeks.

In order to determine whether the exercise programme is good for you, it is very important that you observe closely any changes in the location of the pain. You may notice that pain, originally felt on the outside of the upper arm or down the arm, moves towards the point of your shoulder as a result of the exercises. In other words, your pain may become more **localised** to the shoulder.

If, following an initial pain increase, the pain continues to increase in intensity or spreads to places further away from the shoulder, such as further down the arm or up to the neck, you should stop exercising and seek advice.

Pain Intensity

If your shoulder pain is of such intensity that you can only move your arm with difficulty and cannot find a position to lie comfortably in bed, your approach to the exercises should be cautious and unhurried.

On commencing any of the exercises you may experience an initial increase in pain. This is common and can be expected. As you continue to practise, the pain should quickly diminish, at least to its former level. Usually this occurs during the first exercise session. This will often be followed by the pain becoming less in the arm and more localised to the shoulder joint. Once the pain no longer spreads down the arm and is felt in the shoulder only, the intensity of the pain will steadily decrease over a period of a few days and by continuing the exercises the pain will often disappear entirely.

If, following an initial pain increase, the pain continues to increase in intensity or spreads to places further away from the shoulder, such as further down the arm or up to the neck, you should stop exercising and seek advice. In other words, do not continue with any of the exercises if your symptoms are much worse immediately after exercising and remain worse the next day; or if, during exercising, symptoms are produced or increased in the arm below the elbow.

As discussed earlier, once you have started this exercise programme, you should expect new pains to develop. These are different from your original pain and are usually felt in areas of the shoulder area that were previously not affected. New pains are the result of performing movements your body is not used to and, provided you continue with the exercises, they will wear off in three to four days.

New pains are the result of performing movements your body is not used to and, provided you continue with the exercises, they will wear off in three to four days.

If your symptoms have been present rather continuously for many weeks or months, you should not expect to be painfree in two to three days. The response may be slower, but, if you are doing the correct exercises, it will only be a matter of time before the pain subsides.

As long as your pain is slowly improving, continue with the exercises that have led to this improvement. Do not change anything in your established routine. It may be tempting to add other exercises, but this may disrupt your progress. Wait until improvement stops before considering any other activity or exercise.

Starting the exercise programme

When you commence this exercise programme you should stop any other exercises that you may have been shown elsewhere or happen to do regularly – for example, for fitness or sport. If you want to continue with exercises other than the ones described in this book for shoulder problems, you should wait until your pains have subsided completely.

It is recommended that you adopt the standing position when learning to perform the exercises.

As long as your pain is slowly improving, continue with the exercises that have led to this improvement. Do not change anything in your established routine. It may be tempting to add other exercises, but this may disrupt your progress. Wait until improvement stops before considering any other activity or exercise.

NOTES

Chapter 5: The Exercise Programme

Overview

In the opening chapters we have outlined the conditions that can cause pain, reduce mobility and limit function in your shoulder. As discussed in the Introduction, it is sometimes difficult to determine exactly what shoulder condition you have.

Therefore it is vital to follow the exercise sequence exactly as outlined in Chapters 5 and 6, as it is a **systematic** approach that will enable you to successfully self-treat your shoulder condition.

The exercises are described and clearly illustrated in Chapter 5, while Chapter 6 details more information as to **when** to apply the exercises and the **responses** that may be expected.

We recommend that you try each of the exercises described below with your pain free arm first, and then cautiously attempt the same exercise with your painful arm. In this way you can compare the pain and range of motion in both arms. By commencing the exercise programme as described in Chapter 6 you can attempt to improve the painful arm until it feels and moves the same way as your pain free arm.

It is strongly recommended that you familiarise yourself with the exercises and information in chapters 5 and 6 before commencing the programme.

Exercise 1: Shoulder pendular exercise

A pendular exercise is a slow swinging of the arm in a painfree arc of motion.

This exercise is used mainly in the treatment of significant shoulder pain, and can be useful in decreasing the pain during the night or in the morning caused by sleeping on your painful side, or the sudden pain you may get when placing your painful arm into a sleeve while dressing.

Stand up and then position yourself leaning forward, supporting yourself with your good arm on a table or chair, with your painful shoulder hanging down. Allow your painful shoulder to relax completely (Photo 67). Now you are ready to start the first exercise.



Photo 67

Slowly swing your arm backwards and forwards in an arc of motion that is pain-free (Photos 68, 69 and 70).

If this movement is painful, perform the exercise in a smaller arc of motion so the movement is pain-free. Some people find that holding a small weight – such as a tin of food or a small dumbbell – in the hand while performing this exercise also assists with decreasing pain.

When used in the treatment of shoulder **pain** the exercise should be repeated ten times per session, with the sessions spread evenly six to eight times throughout the day until you go to bed at night. This means you should repeat the sessions about every two hours.



Photo 68



Photo 69



Photo 70



Photo 71



Photo 72



Photo 73



Photo 74

Exercise 2: Shoulder extension in standing

Extension means reaching your arm backwards. This exercise can be used both in the treatment and the prevention of shoulder pain, and is particularly useful if you have more pain or less movement than your pain free shoulder when you attempt this exercise.

Stand upright with your head and shoulders pulled back (Photo 71). Now you are ready to start Exercise 2.

Place the arm of your painful shoulder behind your back (Photo 72). Now with your pain free arm slowly push the painful arm away from your back until you feel a firm stretch at your painful shoulder (Photo 73 and 74).

Once you have held this position for a few seconds, you should return your arm to the starting position. Each time you perform this movement cycle try to push your arm backwards a little further so that in the end you have reached the maximum possible degree of extension.

When you have reached the stage that you are comfortable pushing your arm behind you as far as possible with your pain free arm, progress the exercise by holding a pole, golf club or broomstick in both hands as in Photo 75.

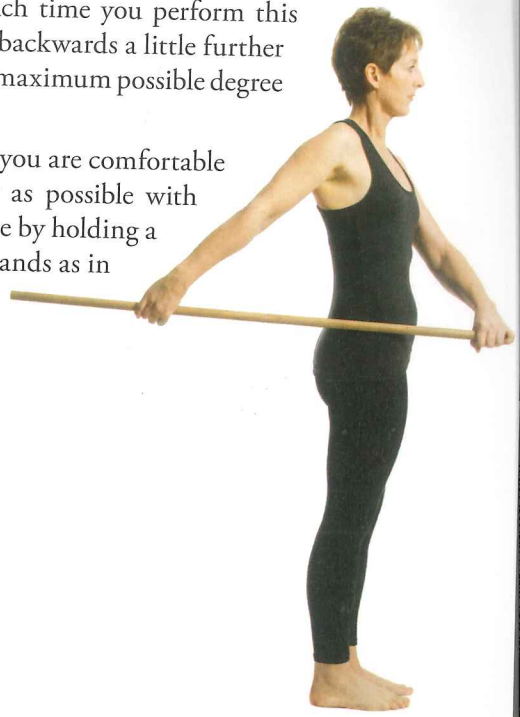


Photo 75



Photo 76



Photo 77

Another method of taking the arm to end range is to place your hand palm down on a surface such as a chair, sideboard or window frame (Photo 76). Then slowly bend your knees to apply an overpressure to the extension exercise (Photo 77). The higher you place your arm, the less you will have to bend your knees to produce an effective stretch.

When this exercise is used in the treatment of shoulder **pain**, Exercise 2 should be repeated ten times per session and the sessions should be spread evenly six to eight times throughout the day until you go to bed at night. This means you should repeat the sessions about every two hours.

The higher you place your arm, the less you will have to bend your knees to produce an effective stretch.



Photo 78



Photo 79



Photo 80

Exercise 3: Shoulder internal rotation in standing

Internal rotation means placing your hand up behind your back. This exercise can be used both in the **treatment** and the **prevention** of shoulder pain, and is particularly useful if you have more pain or less movement than your pain free shoulder when you attempt this exercise.

Stand upright with your head and shoulders pulled back (Photo 78).

Place the arm of your painful shoulder behind your back (Photo 79). Now with your pain free arm slowly push the painful arm up your back until you feel a firm stretch at your painful shoulder (Photos 80, 81).

Once you have held this position for a few seconds, you should return your arm to the starting position. Each time you perform this movement cycle try to push your arm up your back a little further so that in the end you have reached the maximum possible internal rotation.



Photo 81



Photo 82



Photo 83

If your pain is too severe to tolerate Exercise 3, you should discontinue it and go back to performing Exercise 2 for a few more days, before trying it again.

When you have reached the stage that you are comfortable pushing your arm up your back, progress the exercise by using a towel instead (Photo 82) and pull the arm of your painful shoulder up your back with your pain free arm (Photo 83).

When used in the treatment of shoulder **pain** Exercise 3 should be repeated ten times per session and the sessions should be spread evenly six to eight times throughout the day until you go to bed at night. This means you should repeat the sessions about every two hours. If this is very painful, start with four repetitions, four to six times a day and increase as able.

If your pain is too severe to tolerate Exercise 3, you should discontinue it and go back to performing Exercise 2 for a few more days, before trying it again.

Exercise 4: Shoulder elevation in lying

Elevation means lifting your arms forwards and upwards. This exercise can be used if you have pain or difficulty in attempting to lift your arm in front of you in standing. It is a way of gradually improving this movement before commencing Exercise 5 in standing.

Lie face up on a bed or the floor. Rest your head and shoulders flat; do **not** use a pillow (Photo 84). Now you are ready to start Exercise 4.

Interlock the fingers of both hands. Slowly raise your arms over your head (Photo 85) using the pain free arm to assist the arm of the painful or stiff shoulder until you feel a firm stretch at your affected shoulder.

Once you have held this position for a few seconds, you should return your arm to the starting position. Each time you perform this movement cycle try to push your arms back a little further so that in the end you have reached the maximum possible elevation (Photo 86).

When used in the treatment of shoulder pain or stiffness Exercise 4 should be repeated ten times per session and the sessions should be spread evenly six to eight times throughout the day until you go to bed at night. This means you should repeat the sessions about every two hours.



Photo 84

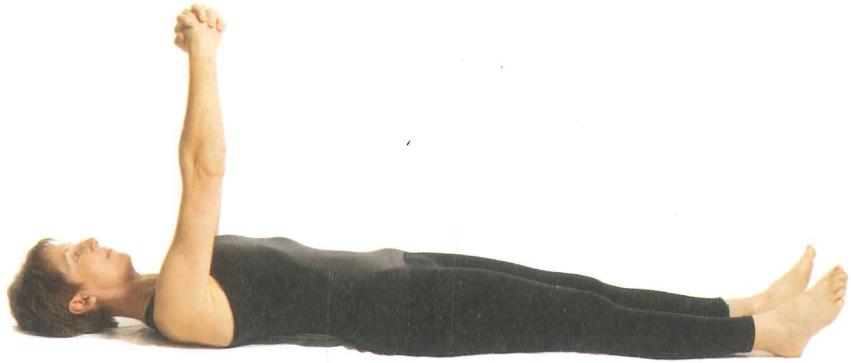


Photo 85



Photo 86

Exercise 5: Shoulder elevation in standing

Elevation means lifting your arms forwards and upwards.

Stand upright with your head and shoulders pulled back and hold a cloth in the hand of your painful or stiff shoulder against a smooth wall or door frame (Photo 87). Now slowly slide your hand up the wall until you feel a firm stretch at your painful or stiff shoulder (Photo 88).

Once you have held this position for a few seconds, you should return your arm to the starting position (Photo 87). Each time you perform this movement cycle try to push your arm up a little further so that in the end you have reached the maximum possible elevation (Photo 89).

When used in the treatment of shoulder **pain** or **stiffness** Exercise 5 should be repeated ten times per session and the sessions should be spread evenly six to eight times throughout the day until you go to bed at night. This means you should repeat the sessions about every two hours.

If your pain is too severe to tolerate Exercise 5, you should discontinue it, and go back to performing Exercise 4 for a few more days, before trying it again.

If your pain is too severe to tolerate Exercise 5, you should discontinue it and go back to performing Exercise 4 for a few more days, before trying it again.



Photo 87



Photo 88



Photo 89

Exercise 6: Shoulder strengthening – isometric abduction in standing

Isometric means static tensioning, and abduction means pushing your arm sideways, away from the body. This exercise is a way of beginning to strengthen the rotator cuff muscles and tendons around the shoulder once your shoulder range of motion has recovered but you still have some shoulder pain. Instructions on when to apply this exercise are further described in Chapter 6.

Stand upright with your painful side near a wall. Make sure your feet are apart and your arm is relaxed by your side (Photo 90). Slowly push the outside of the hand of your painful arm against the wall until you feel a firm tension in your shoulder – but do not allow further movement of your arm or body (Photo 91).

Hold this position for a few seconds, then return your arm to the starting position. Each time you perform this movement cycle try to apply more pressure against the wall so that in the end you are able to place a firm tension with some discomfort during each repetition of the exercise. However, any discomfort that is produced must settle off within a few minutes of completing each set of ten repetitions.

When used in the treatment of shoulder **pain** Exercise 6 should be repeated ten times per session and the sessions should be spread evenly six to eight times throughout the day until you go to bed at night. This means you should repeat the sessions about every two hours.



Photo 90



Photo 91

Chapter 6: When to apply the exercises

When you are in significant pain

If the pain is severe you will find certain movements impossible to do, and it may be difficult to perform your daily activities or find a comfortable position in which to rest. Even though you have significant pain, you should always attempt to commence with Exercise 1: Shoulder pendular exercise (Photo 92).

Many people find this exercise gives substantial relief from pain. It is also very important to follow the postural education in Chapter 3 in an attempt to find resting positions where you are as comfortable as possible when sitting, standing and lying.

You should seek advice from your doctor if your shoulder pain is of such severity that it is impossible to perform this exercise or your pain is becoming intolerable.



Photo 92

When you have reached the stage over the next two days to two weeks that either your pain reduces or you are able to start to move your arm behind your back you can progress to Exercise 2: Shoulder extension exercise in standing (Photos 93, 94, 95 and 96).



Photo 93



Photo 94



Photo 95



Photo 96

When acute or severe pain has subsided

When acute or severe pain has subsided, or you have only intermittent pain, you may still feel some pain when moving your arm in certain ways. Commonly, you will notice this when raising your arm out to the side or attempting to reach behind your back. It is likely that at this stage of your shoulder condition, healing of the overstretched or damaged soft tissues has taken place.

Now you must ensure that the elasticity, strength and flexibility of your shoulder are restored without causing further damage. This is the aim of the structured exercise sequence outlined in this chapter.

However, in a few cases you will find by performing Exercises 2 to 5 that the range of motion in your painful and pain free arms is the **same** and that you can perform all these exercises with no discomfort. If this applies to you, you may move directly to Exercise 6 in order to strengthen your shoulder.

You must ensure that the elasticity, strength and flexibility of your shoulder are restored without causing further damage. This is the aim of the structured exercise sequence outlined in this chapter.

To start this process of recovery

Commence with Exercise 2: Shoulder extension in standing (Photo 97). Repeat the exercise up to ten times. Each time you repeat the exercise you must move to the **edge** of the pain and then release the pressure. Over a few days you will generally find that the movement begins to improve, and you can progress this exercise to ensure you are getting to end range by using the pole or furniture as described in Chapter 5 (Photos 98 and 99).



Photo 97



Photo 98



Photo 99

Again each time you repeat the exercise you must move to the **edge** of the pain and then release the pressure. It may take several days or up to a few weeks before you are able to progress from Exercise 2 to 3. However, as soon as you can perform this exercise comfortably, progress to Exercise 3: Shoulder internal rotation in standing (Photos 100, 101 and 102).

Repeat the exercise up to ten times. Each time you repeat the exercise you must move to the **edge** of the pain and then release the pressure. Your pain should decrease and disappear entirely over a period of several days, or up to a few weeks, as this movement improves. You should be able to take your affected arm up your back as comfortably as your pain free arm, and progress to the use of the towel to ensure you are getting to end range (Photo 103).



Photo 100



Photo 101



Photo 102

Once you are able to perform Exercise 3 comfortably with a towel and have obtained the same range of motion as your pain free arm, you will generally have noticed a significant decrease in your shoulder pain. In many cases the pain will have abolished, and you will also have noticed an increase in the functional use of your arm during your daily activities. If this is the case you are well on your way to recovering the strength in your shoulder muscles as you gradually increase your activities. However, do not forget the important postural education in Chapter 3 to prevent the onset of your pain at rest. Once you are completely symptom-free and have no pain or stiffness, follow the guidelines on page 91 to prevent recurrence of shoulder problems.

If, after practising Exercises 2 and 3 for two weeks without noticing any improvement in your ability to raise your arm in front of you, you can begin Exercise 4: Shoulder elevation in lying (Photo 104).

Repeat the exercise up to ten times. Each time you repeat the exercise you must move to the **edge** of the pain and then release the pressure. That is, you must feel some discomfort during each repetition of the exercise. However, any discomfort following the set of exercises must settle within a few minutes. In some cases it may take a few weeks to restore the ability to reach above your head. However, as soon as you are able to perform this exercise comfortably, you can progress onto Exercise 5: Shoulder elevation in standing (Photo 105).



Photo 103



Photo 104

Repeat the exercise up to ten times, following the instructions above. Again it may take several days to a few weeks before you are able to take your affected arm above your head with comfort. If Exercise 5 is painful to perform, continue with Exercise 4 for a few weeks before attempting it again.

If you feel **only stiffness** on these movements, rather than pain, you should do the same exercises but apply more **overpressure** at the end of each movement. By exercising in this way you achieve movement to the maximum possible degree. In most cases you should have restored normal function within three to six weeks.

Once you have restored the normal range of motion to your affected shoulder, and are able to perform Exercises 2, 3, 4 and 5 fully with no pain, most of you will find that you no longer have shoulder pain and have regained the functional use of your affected shoulder.

Once you are completely symptom free and have no pain or stiffness, you should follow the guidelines on page 86 to prevent recurrence of shoulder problems.



Photo 105

If you have carefully followed the exercise sequence for a few weeks, and you have not achieved the ability to perform Exercises 2, 3, 4 and 5 comfortably, refer to the section on Frozen Shoulder on page 88 for treatment guidelines.

No response or benefit

When you continue to experience shoulder pain on raised arm activities, yet are able to perform Exercises 2, 3, 4 and 5, you may need to strengthen the rotator cuff muscles and tendons around your shoulder. If this is the case, you should commence with Exercise 6: Shoulder strengthening isometric abduction (Photo 106).

Repeat the exercise up to ten times. Each time you repeat the exercise you must move to the edge of the pain and then release the pressure. However, any discomfort that is produced must settle off within a few minutes of completing each set of ten repetitions.

By exercising this way you place the appropriate loading required to stimulate a recovery in the affected structures around your shoulder.

In most cases you will notice the pain gradually reducing over a three-week period, and by six to twelve weeks you should have a largely pain free shoulder.

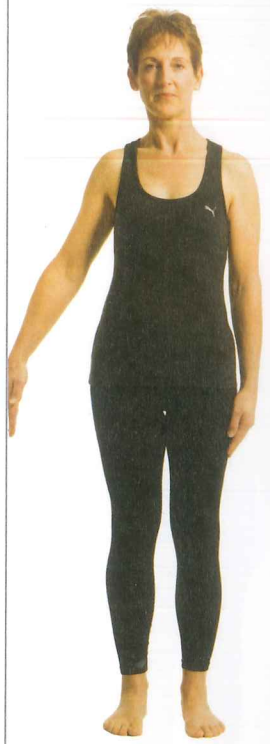


Photo 106



Photo 107



Photo 108

When you have no pain or stiffness

Many people with shoulder problems have lengthy spells in which they experience little or no pain. If you have had one or more episodes of shoulder pain, you should start the exercise programme even though you may be pain free at the moment. However, in this situation it is not necessary to do **all** the exercises or to exercise every **two** hours.

To prevent recurrence of shoulder problems you should perform Exercise 3: Shoulder internal rotation in standing (Photo 107) followed by Exercise 5: Shoulder elevation in standing (Photo 108) a **couple** of times a day to ensure you maintain this shoulder range of motion.

If Exercise 6: Shoulder strengthening isometric abduction (Photo 109) has been the exercise sequence that has relieved your shoulder symptoms, perform this exercise instead.

Perform these exercises on a regular basis, preferably in the morning and at night. Furthermore, whenever you feel pain developing during activity/work or while sitting, you should perform them. As it takes only a few minutes to perform one session of these exercises, lack of time should **never** be used as an excuse for not being able to do them.

It is even more important that you watch your shoulder postures at all times and never again let postural stresses be the cause of shoulder pain. The exercises described in this book will have very little or no effect if you constantly fall back into your previous poor shoulder postures and raised arm positions. While it may be necessary to exercise in the manner described above for the rest of your life, it is absolutely **essential** that you develop and maintain good postural habits.



Photo 109

A graduated increase in activities that generally improve your fitness should also be considered. Even a regular walking programme will assist in maintaining upright posture and arm mobility whereas appropriately structured gym programmes, aerobics or fitness classes are examples of activities that will specifically assist with flexibility and strength in the neck and shoulder girdle.

Yoga, Tai Chi and Martial Arts are activities that specifically promote postural awareness while also using exercises that will ensure the shoulders and arms are put through a wide range of motion.

Frozen shoulder

As described earlier on page 56, a frozen shoulder goes through three stages. In stage one the shoulder becomes increasingly painful but remains mobile. During the second stage the shoulder becomes increasingly less mobile in all directions while remaining painful. To assess the state of your shoulder we recommend you perform Exercises 1, 2 and 3 for three weeks – initially very cautiously if required by your pain response. If there is no improvement in your pain and no increase in your shoulder movement in any direction, we recommend you consult a doctor or physician to confirm your condition. They may be able to offer you some benefit from a course of medication, or refer you on for some other intervention as appropriate.

In the third state of a frozen shoulder, when your shoulder becomes less painful but remains stiff, we recommend you continue with the exercise programme for three to six months. An increase in range of motion and functional movement with everyday tasks can be very slow but in most cases the result eventually is a very good recovery.

The exercises described in this book will have very little or no effect if you constantly fall back into your previous poor shoulder postures and raised arm positions.

Recurrence

At the first sign of recurrence of shoulder pain you should immediately perform the exercises that have previously helped you.

If your pain is already too severe to tolerate these exercises or if they fail to reduce the pain, you must quickly introduce Exercise 1: Shoulder pendular exercise and Exercise 2: Shoulder extension in standing, and then gradually work through the exercise sequence. Again, you must pay extra attention to your shoulder posture, regularly perform postural correction, and maintain the correct posture as much as you can when sitting, standing and lying.

If you continue to have shoulder pain and a loss of function, we recommend you seek advice from a clinician that is credentialed or diplomaed by the McKenzie Institute International. You can find their details by reference to the website: www.mckenziemethod.com

References

Lewis JS, Wright C, Green A (2005)
Subacromial Impingement Syndrome: The Effect of Changing Posture on Shoulder Range of Motion. Journal of Orthopaedic & Sports Physical Therapy 35, 2, 72-87.

Nomden JG, Slagers AJ, Bergman GJD, Winters JC, Kropmans TJB, Dijkstra PU (2009)
Interobserver Reliability of Physical Examination of the Shoulder. Manual Therapy 14, 152-159.

Kelley MJ, MCClure PW, Leggin BG (2009)
Frozen Shoulder: Evidence and a Proposed Model Guiding Rehabilitation. Journal of Orthopaedic & Sports Physical Therapy 39, 2, 135-148.

Schellingerhout JM, Verhagen AP, Thoms S, Koes BW (2008)
Lack of Uniformity in Diagnostic Labelling of Shoulder Pain: Time for a different approach. Manual Therapy 13, 478-483.

Schibany N, Zehetgruber H, Kainberger F, Wurnig C, Ba-Ssalamah A, Herneth AM, Lang T, Gruber D, Breitenseher MJ (2004)
Rotator Cuff Tears in Asymptomatic Individuals: A Clinical and Ultrasonographic Screening Study. European Journal of Radiology 51, 263-268.

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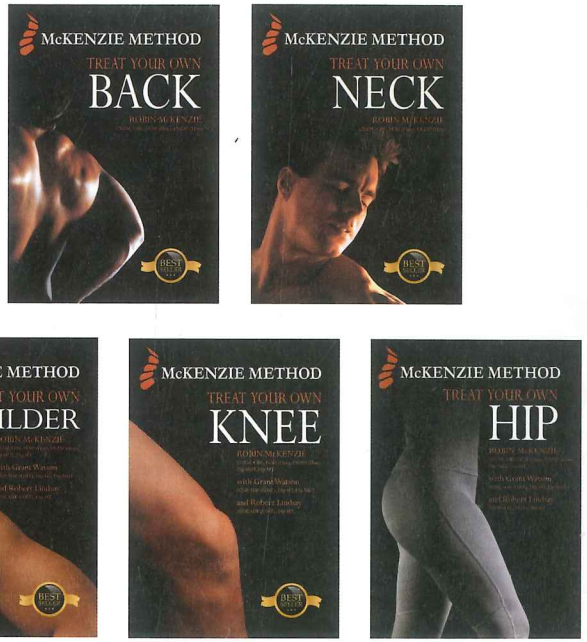
The McKenzie Institute International Head Office

3 Alexander Road, PO Box 2026, Raumati Beach 5255, New Zealand

Website: **www.mckenziemdt.org**
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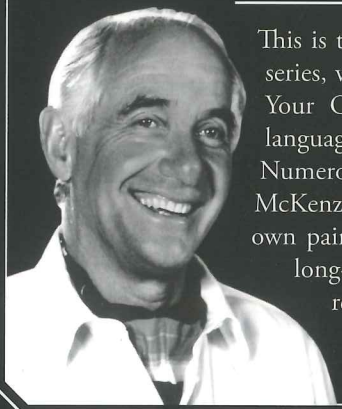
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