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Back Care Booklet

BACK PAIN

Your back consists of a series of bones called vertebrae, which have interposing discs. It can be compared with a series of building blocks placed on top of the other, each separated by a pad or disc.

Back pain is one of the most common conditions affecting nearly all adults at some stage of their life. Fortunately for most people the injury and its problems are short lived and after it heals they return back to normal. However, for others the injury is more severe and its effects long-lasting. It can affect all parts of your day, not just the times when you are active – at work or at home.

Cervical

Thoracic

It is often difficult to give a diagnosis of exactly what is wrong with your back. This is partly because your back is made up of many structures.

The vertebrae are the small bones that make up the spine. They sit one on top of the other, are joined together at the front by a cushion-like structure called the disc, and behind by two small joints. In between is a canal through the bones, which forms a protective passageway for the spinal cord.

Lumbar

From the spinal cord, nerves pass away from the spine through small gaps on the side between each two vertebrae. The nerves to the arms come from the neck, and the nerves for the legs come from the lower back.

Sacral

Healing of Back Injuries

For the damaged structures to heal, good blood supply is essential for repair, and to remove waste products. The bones, ligaments and muscles of the back have a good blood supply, so it can heal reasonably well. The problem is that they usually heal with a special type of tissue called scar tissue, which is strong, but not as flexible as normal muscles, ligaments, etc. However, discs have a poor blood supply and this often results in slower healing. Discs, therefore may be more easily damaged if care is not taken to prevent this. The most common type of injury to the back is to the soft tissue – the muscles, tendons and ligaments. Most of these soft tissue injuries heal well, and this is why most people with back injuries recover.

Back pain is often an unseen injury to others. As such it is sometimes difficult to understand the problems that a person with back injury has to live with daily. To help yourself, it is important to keep as mobile as possible and learn how to move your body to prevent strain on your back. This handout outlines some general rules for caring for your back and ways these guidelines could be applied at home in day to day living. It should be read more than once, and invite your family to read it too. It is very helpful to discuss the information with your physiotherapist or occupational therapist to answer any further questions.

The advice contained in the handout is of a general nature and it is important to apply it to your individual situation with professional guidance.

The nerves go to the muscles of the body and act like telephone lines from the brain; instructing muscles to contract, thus allowing us to move. They also carry information from the body back to the brain; telling it sensory information about temperature, touch, pressure and pain. Bladder and bowel function is also controlled by nerves from the lower back.

The best known of these nerves is the sciatic nerve. It is made up of several nerve roots and goes back from the low back, through the buttock, down the back of the leg and into the foot. Sciatica is the inflammation of this nerve.

Pain in the back can come from damage or irritation to any of the structures in the back – joints, muscles, tendons, ligaments, nerves, bone and disc.

If the nerve roots in the lower back are being irritated, this can cause pain to be felt down the leg, or even muscle weakness. It is possible to have pain in the leg without pain in the back, however, this is unusual.

Disc Injuries

One way the nerves can be irritated is from pressure from a damaged disc. The disc is designed to act like a rubber washer, cushioning movement and allowing the spine to move in many directions. If it is damaged it can protrude backwards where it can press against one of the nerves, which passes into the arm or the leg. A common term for this is “slipped disc”. The disc does not actually slip. It is made up of a very tough outer covering with a thick, jelly-like centre. If the outer cover is damaged, the jelly-like central substance tends to protrude. The disc can then put pressure on the nerve root.

LIFTING AND HANDLING

Incorrect lifting and handling can result in injuries most commonly to muscles and ligaments, but also to discs and bones. Muscles can be strained, ligaments and discs can tear, which may lead to a ruptured disc. Often the back injury is a result of years of abuse and of incorrect lifting and handling. The final act which causes the pain may be as simple as bending over to tie a shoelace.

The most common area for back pain is the lumbar or lower back region. If you lift an object incorrectly, you can exert pressure of more than ten times the weight of that object on your lower back. Most of us relate lifting to work or industry, but you perform lifting all the time, even when just moving your body by standing up. So knowing about lifting and how to do it correctly is important.

Steps to Safe Lifting

1. Get a firm footing. Place feet shoulder width apart pointing outwards.
2. Bend at the hips, knees and ankles.
3. Brace your stomach muscles to support your back.
4. Use the muscles in your legs to lift. They are much more powerful than your back muscles.
5. Keep your head and shoulders up and your lower back arched inwards. Move smoothly.
6. Keep the load close to you to minimise stress on your spine.
7. Never twist with a load. Use your feet to turn, facing the direction of your destination.
8. If the lift is heavy, do not attempt to lift. Always seek assistance.

If you are lifting with someone else it is better that they are of a similar height. Make sure you co-ordinate the lift by lifting on the count of three.

LOG ROLLING AND GETTING IN/ OUT OF BED

Log Roll

Out of Bed

1. Lying on back, bend left knee and place left arm across chest.
2. Tighten your abdominals, and
3. Roll all in one movement to the right.
4. Reverse for rolling to the left.
5. Always move as one unit.

In/ Out of Bed

1. Lower self to the bed by raising legs and lowering head at the same time to end in side lying.
2. Bend both knees and tighten abdominals to roll onto back if desired.
3. To sit up, log roll to side lying and use the same movements in reverse.
4. Keep trunk aligned with legs.

LYING

Lying on your back puts the least amount of stress on your spine. However it is important to be comfortable when sleeping. Your mattress should be supportive yet comfortable. A firmer mattress is best for most people.

- When you lie on your side, it is best for the knees to be slightly bent and your top knee to be supported by a pillow (to prevent twisting of the spine). Keep a single pillow under the head, thick enough to fill the gap between the point of the shoulder and the ear, keeping the spine in a straight line.
- When on your back, use a single pillow to support the head, making sure it is not too high. A pillow should keep the head in line with the spine. You may find a small rolled hand towel in the centre of your back (to support your lumbar curve), or a pillow behind the knees aids comfort.
- When lying on your stomach, a flattened pillow is advised. Do not attempt this six weeks post surgery unless otherwise advised by your medical team.

STANDING

- Stand with your feet shoulder width apart and your toes pointing out .
- Knees straight but relaxed.
- Abdomen held in comfortably.
- Shoulder straight, but relaxed and chin tucked in comfortably.

Advice:

Wear supportive low heeled shoes, preferably with rubber soles. High heeled shoes alter your centre of gravity and increase stress on muscles and ligaments.

When standing for prolonged periods alternatively place each foot on a foot stool or telephone book. This helps to flatten the spine by rotating the pelvis.

Stand to cough or sneeze if possible.

SITTING

Sitting places the greatest stress on the spine. Avoid sitting for prolonged periods. It is important to move and stretch every 20 – 30 minutes, particularly when travelling in a car.

Your knees should be level with your hips when sitting. This ensures that you are sitting on your pelvic bones and facilitating the spine's natural curves.

The chairs that are usually the greatest hazard to good sitting posture are low, soft lounge chairs. A firmer chair with a straighter back and solid arms is often better, for example a dining room or kitchen chair.

To achieve a better sitting posture, consider the following:

- Sit back in the chair so you can use a back support. If the seat of the chair is too long for your legs you will slump forward.
- Your feet should rest flat on the floor. If not place them on a small stool or a telephone book.
- Armrests can be used to take some pressure off your back.
- For a better back support, you can place a rolled up towel in the small of your back approximately at waistline. Commercial backrests can be purchased from your occupational therapist or your local chemist.

DRIVING

When you drive you sit; and sitting places a great deal more stress on your lower back than does standing or lying down. If you experience pain or discomfort when travelling for long periods, **STOP**, get out of the car and move around.

Getting in and out

Get into the car by sitting on the side of the seat and pivoting into the car, keeping your pelvis and shoulders facing the same way and your abdominal muscles tight.

When seated

Support your lumbar curve. You may find a lumbar cushion or rolled towel placed behind your bottom, support your spine.

Things to look out for when buying a new car

- Automatic transmission (reduces the use of foot pedals)
- Power Steering (reduces the amount of effort to steer and turn the car)
- Car seat design – good lumbar support, and firm seat.

Consult your Occupational Therapist if you have any problems. Occupational therapists are experienced with vehicle adaptations, driving assessments, equipment and procedures.

MANAGING DAILY ACTIVITIES

Energy Conservation

After back surgery, you may find you fatigue more easily and it is important to pace yourself.

- Organise your schedule (i.e. Try to space your activities throughout the day, alternate light and heavy tasks).
- Rest before you get tired. Have short rest breaks in the middle of a task and between tasks. Do not feel guilty about your rest breaks.
- Use assistive equipment where needed to avoid unnecessary bending and twisting eg. long handled brush and dustpan.
- Eliminate unnecessary motions and tasks.
- Organise work areas to eliminate bending and overhead reaching.
- Allocate difficult tasks to others e.g. carrying shopping, vacuuming.

Please consult your Occupational Therapist for more advice on your individual needs. If return to work is an issue, the Occupational Therapist is able to assist with this. There are many agencies within companies and in the private sector that are able to support your return to work. They can perform site visits, liaise with employers, vocational retraining etc.

PERSONAL CARE

Showering

- Preferably use a shower, with a shower chair if needed.
- Use a bath seat and a shower hose if getting in and out of the bath is a problem and you don't have access to a walk-in shower.
- Sitting down to dry yourself is preferable.
- Aids such as soap-on-a-rope, a long handled washer, or a soap mix help to reduce bending over while washing.
- Whilemay help to put one foot up on a small stool to ease the load.....

Putting on socks

- Sit on a chair of suitable height, keep back straight.
- Cross one foot over the other leg.
- Then put the sock onto your foot.

Putting on trousers

- Sitting on a chair, back straight
- Bend knees up towards chest and put feet through trousers one leg at a time.

Putting on shoes

- Slip on shoes are the easiest to put on but make sure they are flat, supportive and non-slip.

It is best to dress sitting down post-surgery and ensuring that your back is well supported when trying to dress your lower body. If you are unable to do this, please discuss your problems with your Occupational Therapist. They can advise you on correct ways of moving and can provide small aids to trial to allow you to be independent (such as ezi-reach, sock gutter, long handled shoehorn, elastic shoelaces etc).

GENERAL HOUSEHOLD CHORES

Laundry

- Use a trolley to minimise bending
- Clothes line should be between waist and shoulder height.
- Alternatively, dry clothes in a clothes drier. If drier is on the floor, fill and empty it seated

Ironing

- Stand using lunge position (one foot in front of the other) with board at correct height, or with one foot resting on a low stool.
- Alternatively sit on a chair and adjust the board's height.

HEAVY DOMESTIC CHORES

Avoid transporting heavy or large objects from one place to another after your surgery (eg. leaving ironing board in a suitable place rather than taking it in and out of a cupboard, arrange someone to take out the rubbish).

Avoid heavy physical tasks (e.g. Washing the car), particularly jobs that involve twisting and bending post-surgery.

Gardening

Gardening need not be hard work or stressful on your back. All the previous advice on moving and handling is applicable in the garden.

Lawns

- Use a light weight mower and keep as upright as possible when mowing.

Hedges

- Not all hedge need clipping, choose suitable varieties.

Weeding

- Use a weeding stool, available at most hardware stores.
- Weed only within arms' length.
- Plan to spend only short periods in this activity.
- Consider ground cover or mulching to cut weeds.

Watering

- Plan a watering system
- Use a long handled watering wand for hanging baskets and difficult areas.

Tools

- Most gardening tools have handles that are too short and can only be

used with a bent back. Tools which pull through the soil and let you stand upright are easier to use and safer for your back.

Rakes

- Rake from the side to the centre of your body using a gentle pulling action.

Wheelbarrows

- If you can, get a ...wheelbarrow. They are light, easy to push and upto allow rubbish to be swept into

LEISURE

It is important to continue with your sporting and hobby interests; and with good knowledge on the care of your back and some minor alterations in technique and equipment, many activities are still open to you.

Most active sporting hobbies which are generally suitable for people with back pain are swimming and walking.

Some sporting hobbies involve a lot of bending. It is important to protect your back when picking up a ball or heavy object by adhering to the previously discussed rules for lifting.

RELAXATION

Relaxation is a useful tool for people with back pain (or anyone in general) for several reasons:-

- It can prevent or alleviate aches and pains caused by excessive muscle tension.
- It can help to minimise unnecessary fatigue and is useful in aiding recovery after strenuous exercise.
- It can raise the threshold for tolerance to pain.

The main aim of relaxation is to achieve a complete state of physical rest. Although this sounds easy, it is not something that comes naturally to us and must be learned and practised. Talk to your medical team for more information on this.