

## POSTURE HYGIENE

**AUTHOR: Eduardo Martín Morales.**

Phd in Physiotherapy at the University of Granada.

Eddevil@hotmail.com.

### Back aches

Nowadays more than 80% of the population suffers or has suffered from some sort of back aches.

This pain which can become very disturbing in the performance of daily activities has different origins, but in most of the cases, its origin is known and avoidable.

- A muscular or ligamentous disorder
- A bad posture adopted repeatedly or during a certain period of time
- A disorder in the biomechanics of or locomotor system.

A sedentary life style and the lack of exercise can cause overweight, which will have an effect on the distribution of weight in our body, provoking an overcharge.

In order to understand the human body, we must take into account that the body is made out of two halves (hemicorpus), separated from each other by the vertebral column. Any kind of problem or defect in one of the halves can cause an anomalous answer in the other half (muscular contraction).

An incorrect weight distribution will affect the two halves of our body in a different way.

### Muscular contraction as cause of back pains

The contraction can occur when the muscle is asked to make an effort, be it once or repeatedly, which exceeds its capacity. There are furthermore certain unbalances in the anatomy of the back that make certain groups of muscles more able to make efforts while others remain more passive. This may occur when the strength necessary to perform an exercise exceeds the strength of the muscle itself or when we only use one side of our body to lift weight. We should then do some maintenance gymnastics in order to avoid troubles.

### Muscular contraction as a consequence of back aches

When confronted with unbalances, the body reacts with a self defense system (the contraction); which is not the fundamental cause of the pain but nevertheless an added factor which may increase the pain. A weird phenomenon causes the body to feel unprotected and to adopt an altered and harmful posture. This posture increases the muscular contraction and as a consequence, the pain. All of this may lead to a discompensation in the strenght and the siwe of each of the body halves. We should avoid these pathological postures in order not to damage our health.

#### · Basic Postures

Lying down on your back

We have to consider the state of the matrass because the latter has a certain life span which differs according to the manufacturer. We should avoid the very uncomfortable bumps and the deformation of the bed.

The pillow must be of a thickness that allows sleeping with your neck in a right lign with the vertebral column.

Lying down on your belly:

with a pillow in the cervical area and underneath the knees for a perfect support in the lumbar area thusly maintaining the vertebral column in a straight line.

Lying on your side:

With a pillow in the cervical area. The lower knee must be bended and the upper knee must be stretched or both knees must be completely bended. The supporting arm must be bended and lying underneath the pillow and the upper arm must be stretched alongside the body.

Sitting down

With the legs in a right angle and the arms lying on the table or on the arm rests of the chair. Both feet have to be in contact with the floor. The seat should be no longer than 2/3 of the muscle's length, without ever touching the hollow of the knee. The back must touch the back of the chair, especially the lumbar area. The degree of inclination of the back depends on the activity you're performing being 110° in a more relaxed position to get some rest or 105° when you're reading.

#### Standing up

Try to avoid long periods of standing up in a static posture and try to maintain one foot on a solid structure. Change legs after a while. This posture will avoid the accumulation of tension in the lumbar area. Avoid putting your two feet together.

#### Carrying weight

We should divide the weight equally over the two halves of our body in order to avoid discompensations or torced postures. We should therefore use backpacks, whenever possible; with two straps to avoid putting all the weight on one shoulder. Only carry the very necessary and avoid excessive weight.

#### Lifting weight off the floor

We should pick up the weight with our knees slightly bended and our back straightened in order to avoid concentrating strengths in the lumbar area. Get up gradually stretching your legs and making as less effort in the back as possible.

This rule also applies whenever carrying out daily tasks that require a bend-over position (make up the bed, vacuum clean)