

CERVICAL DISC HERNIATION

Definition and cause

We speak of disc herniation when a fragment of an intervertebral disc is expelled outside the disc. This fragment is expelled through one or more cracks in the disc and therefore this cannot happen to a perfectly healthy disc. Herniation differs from disc protrusion, which corresponds to a bulge in the disc that appears progressively as the disc sags. Cracking, herniation and disc protrusion are all consequences of discopathy or degenerative disc disease that is very common in the general population, which explains the very high number of people with disc herniation.

Evolution

Disc herniation is not necessarily serious or painful. Disc herniation is commonly seen in people who never complain about their back. A herniated disc becomes painful when it **compresses a nerve root** located just behind the disc in the spinal cord. It can evolve naturally toward the disappearance of symptoms, even if the hernia usually does not disappear. It can also evolve toward more serious pain and sometimes may even become complicated with **paralysis**. In a large number of patients it becomes cyclical, alternating between painful periods and remission.

Symptoms

Symptoms usually appear after an ordinary effort, with pain in the cervical region, followed a few minutes to a few days later by the appearance of pain in one of the arms. Sometimes it feels like a weight on the back of the shoulders that evolves insidiously and then fluctuates in moving down into the arms. This pain corresponds to compression of a nerve root by the hernia, running behind the disc and going down into the arm on a highly precise path. We speak of cervicobrachial neuralgia. Sometimes the pain goes all the way down to the fingertips, sometimes can only be felt in the trapezius, shoulder or elbow. Alongside the pain, there may be tingling, anesthesia and even paralysis, i.e. losses of strength, often local. When these symptoms occur, the patient should see a physician urgently because they mean that serious lesions on the nerve root are setting in, which are potentially definitive.

Examinations

Disc herniation can be identified well by a scan or MRI. One of these two examinations must be performed before seeking out a surgeon's opinion.



Treatment possibilities

If there is no paralysis, there is never an emergency reason to operate on a herniated disc. The medical treatment to be applied will combine rest, which is crucial, pain relief medication, anti-inflammatories, and sometimes massages or infiltrations. The purpose of this treatment is to relieve inflammation around the compressed nerve root and to wait and see if the symptoms heal naturally. After a few weeks, the physician and the patient will meet to get an idea of the treatment's effectiveness and the chances of spontaneous healing of the flare-up.

Principle of surgical treatment

If the situation does not evolve in a satisfactory manner, and depending on the seriousness of the symptoms presented by the patient, how long the situation has been developing and the morphology of the disc herniation, the surgeon will decide whether surgery is needed to decompress the nerve root in question by removing the hernia.

Surgery

Microsurgery is used for surgical ablation of the herniated disc. Microsurgery is of interest to limit the size of the scar as much as possible and tissue retraction all the way to the spine. Unlike surgery on lumbar disc herniation, the disc must be totally removed in the cervical region for access to the hernia, which is located toward the rear. Sometimes surgery is performed at an advanced stage of disc wear and the hernia may be calcified, with bone spurs (osteophytes) that must also be removed. At the end of the operation, the disc must be replaced with an implant that may be fixed (arthrodesis) or removable (disc prosthesis).

Clinical post-operative care:

You can first get out of bed a few hours after the operation with a simple neck brace. The physiotherapist teaches you the gestures that you will need to apply during your convalescence; how to get up, go to bed, bend down, pick up objects off the floor, personal hygiene. Starting on the first day, you will recover a certain degree of autonomy in performing these everyday gestures. You can usually go home the morning after the surgery. Prescriptions are given when leaving, including bandages, pain medication and sick leave up until the check-up consultation.

Only an experienced practitioner can make a precise spinal pathology diagnosis. The practitioner's role is to determine whether a disc or spine anomaly discovered during an imaging exam is pathological in nature. They will then have to determine the risk and potential evolution involved, a key component in therapeutic decision-making. The diagnosis will make it possible to identify, from among these anomalies, those that are not responsible for the symptoms, that do not entail any risk and therefore do not require any particular treatment.



Convalescence

Once back home, the ideal pace of life combines rest in a confortable position (in a semi-recumbent position with the back at a 45° incline, legs slightly bent at the knees), alternating several time a day with quiet walking on a flat surface, initially for 10-15 minutes and increasing up to an hour or two.

For the first few days, do not try to return to your everyday activities (housework, grocery shopping, driving, carrying even light loads). Then, starting in the 2nd or 3rd week, you will be allowed to return to these activities very progressively, listening to your body and any pain when exerting an effort, which you should take as your limit. Renewed pain during convalescence is often the consequence of excessive activity and will tend to disappear when at rest.

Physical therapy will begin after the 3rd week, starting with massages of scar tissue and painful or contracted areas in the spine. Once your body is prepared, reeducation will start with movement to loosen up your body and to strengthen the spinal cord and lower limbs. Work and sports activities can be resumed between the 4th and 12th week depending on the speed of recovery, which is highly variable fom one patient to the next in this kind of pathology. Recovery time is often faster after a disc prosthesis than after arthrodesis.

Over the long term, there are no particular contraindications and you will be able to lead an active life and practice sports perfectly normally.

Images of our surgical techniques? Visit the Cervical Disc Herniation page on our website.