REVIEW PAPERS

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COMPLEX ASSESSMENT OF THE POST-OPERATIVE STATE AND LIFE QUALITY IN PATIENTS OPERATED FOR HERNIATED DISC

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Summary

The authors assessed the health, family and social state of 29 patients following operation for herniated disc at the 3rd Rheumatology Rehabilitation Department of the National Institute of Rheumatology and Physiotherapy, Budapest, Hungary. Other 21 patients were included randomly owing to lower back pain. Out of the 29 patients only 5 received substantial medical rehabilitation within 3 months. Only 2 patients became symptom-free for longer duration, and only 2 returned to their work. Early adequate treatment, operation in due time and complex rehabilitation accompanied by adequate information and education is the only method of choice to accomplish adequate results.

Key words: herniated disc surgery, rehabilitation, return to work

In cooperation with the Social and Mental Hygienic Service of our institute we assessed with the help of questionnaires the health and social state of 29 patients having been operated for herniated disc at the III. Rheumatology Rehabilitation Department of the National Institute of Rheumatology and Physiotherapy. Besides, we made a complementary comparison in the form of similarly assessing the conditions of 21 randomly chosen patients with lower back pain. Herniated disc often needs operation being it a condition with strong negative effect on lower back pain, falling out of work, and on life quality. It is particularly important to what extent rehabilitation after operation helps to improve life quality diminished before the operation, and to what degree it contributes to the restoration of the sex-, age-, and social state related aspects of it. Our article reveals the experiences in these fields.

SOCIAL STATE OF PATIENTS WITH HERNIATED DISC

11 among the 29 operated patients were females, and 18 persons were males. 2 of the 11 operated female patients took 6 months of sick leave after the surgery. Among the rest of the operated persons one patient took 9 months, while 11 patients were on 12 months' sick leave. Only 2 female patients returned to work after the operation.

As for male patients, 4 of them took 6 months sick leave, 3 of them took 9 months, and 11 of them 12 months. These patients had already been unable to work before the operation.

2 of the male patients who did not undergo surgery took 6 months sick leave, 1 patient 9 months another for 12 months, and 1 person had been living on unemployment benefit. A person receiving unemployment benefit is not entitled to take sick leave, however, he or she is provided with free of charge health care service on the basis of the solidarity principal of the national health insurance system. National health insurance for citizens living by unemployment benefit or by other social benefits is paid from the central national budget. This amounted for 4500 HUF per capita in 2009.

Among the 15 female patients who did not undergo operation 4 took 6 months sick leave, 8 persons took 9 months, and 3 of them took 12 months.

POST-SURGICAL REHABILITATION

It is not necessary to emphasise the importance of rehabilitation after operation. However, it is important to highlight the condition regarding the rehabilitation of the above-summarised male and female patients, because this characterises the importance of the interconnection of operation and rehabilitation. This characterisation un-

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fortunately points to the negative context of the lack of this interconnection.

Only 4 men and 1 woman out of the 29 operated patients could receive medical rehabilitation within three months after their surgery, that is, in due time. All the patients received conservative treatment prior to the operation, mostly in hospitals.

As opposed to this, 10 female patients and 15 male patients could participate in proper medical rehabilitation only much later, that is, more than half a year after the operation. There was even one person who could start his rehabilitation only years after the operation.

According to the questionnaire only 1 female and 3 male patients have become symptom-free after the operation. Only 2 of these 4 persons have enjoyed permanent recovery.

CAPACITY TO WORK

Two women returned to work after operation. Three persons among the rest of them went on full (100%) disability retirement, and they did not find any appropriate job owing to their health condition. 9 female patients needed further treatments because of their health condition. 3 men were not provided with light work, one man did not take up any job because of his cardiovascular diseases. The rest of the patients, namely 14 persons, felt unable to restart working because of their disabilities.

Only few patients' previous social condition has improved, most of them have permanently remained unable to work. This situation is strongly related to late rehabilitation after the operation. Late rehabilitation itself also had a negative psychological effect on the patients, inasmuch as it affirmed their negative self-concept as being 'ill', 'disabled' and 'unable to work'. Therefore, our assessment suggests that the lack of rehabilitation started in due time can even deteriorate the positive effects of an otherwise successful operation.

Besides the demographical data of our questionnaire also includes inquiry about the residence of patients (capital city, city, village, homestead), the per capita monthly income in their families, their present occupation, social status (white-collar work, sitting work, heavy labour, unemployment, disability retirement, retirement), as well as about conservative treatment prior to the operation. We were looking primarily for social correlations and by doing so we have gained insight into the span of time of being unable to work before the operation, as well as about the length of time stretching between the operation and – often very late – rehabilitation. As a result, we have indirectly realised how the lack of early rehabilitation influenced patients' disability of returning to work.

DISCUSSION

Lower back pain is a very common symptom, and its most common cause is a herniated disc. It is also

well-known that a herniated disc can be present in a symptom-free form too, or that the type causing radiculopathy can also become symptom-free by conservative treatment. At the same time, symptoms present are not always directly anatomically induced. Even in case of proper indications operation can bring improvement only in 60-70% of the cases as for the elimination or the significant moderation of symptoms. At the same time, recidivity on the same or other levels is not rare.

Lower back pain itself is very common in advanced industrial societies. In these societies 62-92% of the population has already suffered in their lives from lower back pain of at least one week length and with direct influence on everyday life. Direct and indirect costs in the USA and in Germany are estimated as 50 billion USD and 18 billion EUR, while in the UK only the direct costs themselves go up to 1,6 billion GBP.

According to foreign data, acute lower back pain result in a chronic disease in 5-7% of all cases. Half of the days spent out of work come from 85% of those cases in which patients were unable to work for less than 7 days. At the same time, 80% of the treatment and social costs was spent on 10% of the cases of those patients who were suffering from chronic lower back pain and had become disabled by it. Lower back pain is the second most common reason for becoming unable to work in the developed industrial societies, just as in Hungary. It is first among the most common reasons for having to spend days out of work, and the second-third most common reason for early retirement. In 2003 in Hungary 14,2 billion HUF was spent as sick-pay for 6,5 billion days out of work owing to lower back pain. Although rehabilitation is well-known and its importance is wellemphasised in lectures, periodicals and books, it is still fairly neglected in practice, as our assessment shows.

Today rehabilitation is meant as comprehensive rehabilitation, which comprises the improvement of the physical as well as the psychological condition, just as that of the social condition and the capacity to work. In fact, these are the indirect goals of an operation. Rehabilitation after operation is an indirect preparation for reaching the normal level of all aspects of life quality. However, this requires proper time factors as well.

One of the time factors is the harmonisation of operation and rehabilitation. Rehabilitation started after the operation, that is, after wound healing, is only effective if there is not a big lapse between the two. Rehabilitation has to ensure the gradual restoration of the normal operation of patients' nervous and muscle systems. It's well-known today: "Use it or lose it". Post-operative rehabilitation is meant to prevent this. Therefore, it is not unimportant how much later rehabilitation follows operation. Operation eliminates pain which used to be the main cause of reduced use.

Regular and controlled rehabilitation activity has a serious psychological effect too, and it is one of the factors

that can prevent social regression. By making and keeping the patient active again he or she can gain motivation for activity and work after a period of reduced or lost activity. Operation in itself does not automatically lead here. While the effectiveness of comprehensive rehabilitation after operation refers to gaining back physical and psychological fitness, which is the precondition of the social part of comprehensive rehabilitation. Regained ability for activity gives new perspectives and motivates patients for re-training, which can even lead to taking up different type of jobs.

All this is endangered by late rehabilitation. Patients even after a successful operation resulting in the elimination of pain tend to remain inactive. Not everybody develops an inner need for active life style again. While the goal is not to return to the earlier social life-quality, but to leave it. Therefore, proper rehabilitation can also prevent an aptitude for passivity by its life-style re-settling and motivating effect. Our assessment shows that most of the operated patients have not striven for actively finding a work possibility, but they have rather decided against this. Most probably late or omitted rehabilitation had played an important role in this.

SUMMARY

Operation for herniated disc is an important intervention regarding either the moderation of pain, or the ability of moving, or the restoration of life quality. The level of pain and the ability of moving together with the confirming result of some imaging diagnosis serve as decisive factors regarding the necessity of operation and its timing. Of course, professional conservative therapy and the easing of pain are also meant to prevent the illness from turning to be chronic. Treatment prior to operation can enhance the better efficiency of the operation and of the post-operational rehabilitation.

This process could anticipate the lack of life style restoration and can lead to officially qualified reduced working ability as an individual or social solution both in foreign and local respect. Comprehensive rehabilitation has to involve post-surgical support too, even incorporating psychological help, if necessary. Strengthening patients' hope in their own healing and formulating or keeping up their need for an active life style and returning to work are the most important. Although retreating from work is a type of relaxing, it is only a surface solution. In fact, it narrows the scope of the patient's activities, and it pushes them to retreat more and more from the family and the broader social circles, too. Data in the discussion about the time spent out of work owing to lower back pain not only serve with information regarding social aspects, but they also represent the narrowing of patients' social place. The goal of comprehensive rehabilitation is to keep up and broaden patients' activity to the highest possible level. Largescale education and the raising of the level of health care culture are needed to make rehabilitation really become comprehensive.

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