

Faculty of Nursing and Health Sciences, Medical University of Lublin

KAZIMIERA ADAMCZYK, REGINA LORENCOWICZ, DOROTA FLIS,
JOANNA NIEZBECKA, ANNA ZAJKO

Health education and radicular syndrome

Providing a patient with an adequate health education aims at his/her preparation to cope in a situation of illness and prevention of its recurrence, i.e. the preparation for self-care.

Radicular syndrome is most often caused by degenerative changes in the vertebral region affecting articulations between vertebrae, facet joints and ligaments, or by herniation of the nucleus pulposus. Less frequent causes of this syndrome are inflammatory, infectious and cancerous processes (1,3,4,5). These changes result in a mechanical compression of nerve roots or blood vessels with secondary oxygen deficiency and oedema in tissues supplied by these vessels as well as an involuntary muscular tone and abnormal posture (1,3,4,5).

Pharmacotherapy and the skill to prevent the relapses by the proper preparation of patients for self-care through health education, are of great importance for the management of the disease. Health education consists in the shaping of health promoting incentives and attitudes (2).

OBJECTIVE

The aim of the study was the evaluation of the level of health education among patients with radicular syndrome.

The study was conducted on the basis of a questionnaire and educational charts which covered the main requirements with respect to the education of patients with radicular syndrome among 45 patients – 21 males and 24 females aged 23-64.

The knowledge of the principles of preventing the recurrence of pain among patients suffering from the radicular syndrome varied both during the first and the second measurement; however, due to health education the level of this knowledge was considerably higher at Stage II of the study.

RESULTS

The principles concerning the standing position, such as: high elevation of the head, retraction of the belly and buttocks, alternate stepping on and off a footstool, also avoiding stress on the back by not remaining in one position for a long time, e.g. standing, were fully known by slightly over 15.0% of patients, whereas nearly 33% of patients were completely unfamiliar with these principles at Stage

I of the study. At Stage II, however, the majority of patients gave the correct answers and correctly described the body posture at standing.

While sitting, the patients should avoid soft chairs, crossing one's legs, turning rapidly and bending backwards, which may lead to the hyperextension in the lumbar region, while simultaneously remembering that the thighs should be at right angles to the spine, with properly chosen chairs supporting the lower section of the back. At Stage I of the study this information was possessed by 25.0% of patients, whereas at Stage II – by over 50%.

A proper working post – a table or a desk – is also very important. The workshop should be adjusted to the body size. At Stage I of the study 21.0% of patients had knowledge of this problem, while at Stage II – 55%. The subsequent issue was the working technique, i.e. proper position at work, performance of intentional movements, which was known to 19.6% of respondents at Stage I, and 57.8% at Stage II of the study.

Lying in a firm bed is recommended (semi-hard mattress), on small pillows which should fill the angle between the neck and shoulder maintaining the head in line with the spine; rising from the lying position should be preceded by pulling up the knees and then lowering legs from the bed. Over 40.0% of patients gave satisfactory answers at Stage I of the study, while at Stage II the percentage of respondents who possessed the correct knowledge radically increased to 70.0%.

The principle of skilful leaning forward, reaching for objects placed above and below, was known to over 50.0% of respondents at Stage I of the study, while at Stage II the level of complete knowledge increased to nearly 100.0%, with 0.0% of incorrect answers.

Almost all patients were familiar with the methods of lifting loads (leaning position should be avoided, loads should be lifted with the knees bent and not higher than the waist), handling loads and their size (loads should be distributed on both shoulders, carried in a rucksack, transported rather than carried). At Stage I of the study no respondents had 0.0% of knowledge of this problem, whereas at Stage II all patients gave correct answers.

An important element supporting the treatment are exercises of the trunk muscles (muscles of the back and stomach) as well as the muscles of the legs, especially buttocks, which help to create a natural corset supporting the spine. Reasonable and systematic physical activity as well as the elimination of akinesia are of the utmost importance in pain prophylaxis. At Stage I of the study, the recommendations concerning walking a distance of several kilometres daily, taking general physical exercises and exercises strengthening stomach muscles (a projecting, drooping belly overloads the vertebral discs in the lumbar region) were mentioned by about 33% of patients, while at Stage II – almost all respondents were aware of this problem.

Obesity causes disorders in the normal functions of the muscular and osteoarticular systems, and results in an excessive load on articular cartilages as well as the degeneration of joints. The knowledge of an obesity-preventing diet, which is necessary in radicular syndrome, was possessed by about 33% of patients at Stage I of the study, a double increase in this percentage being noted at Stage II.

The skills of maintaining the correct position while driving a car were possessed by 25.3% of respondents who were drivers (27 people) during the first measurement, whereas during the second measurement a threefold increase in this percentage was observed.

The respondents mentioned the necessity to give up smoking (75.8% – at Stage I; 100% – at Stage II) which causes the constriction of blood vessels in tissues of the lumbar region resulting in an increased pain.

DISCUSSION

Significant differences were observed in the level of health knowledge between individual parameters and the stage of the study. Due to health education the patients showed a considerably higher level of knowledge at Stage II of the study. The highest level of patients' knowledge was noted with respect to lifting and handling loads, as well as leaning forward, both during Stage I and II.

The respondents had the greatest difficulties with defining the principles of correct standing position. Although the percentage of patients who had a good knowledge of this problem drastically increased after they had received health education, it still remained relatively low (53.3%).

The results of the study confirmed that at Stage I of the study the percentage of patients who were familiar with the management of radicular syndrome and prevented its relapses was low – 43.0% of respondents on average gave complete answers; 37.5% – partially correct answers; and as many as 19.7% – incorrect or no answers. At Stage II of the study, i.e. after health education, the percentage of patients who gave satisfactory answers was 76.5%, an increase by 33.5%, with a low percentage of partially correct, incorrect or no answers (16.5% and 6.9% respectively).

CONCLUSIONS

1. The respondents showed the highest level of knowledge with respect to problems concerning lifting and handling loads and the principles of leaning, whereas they found it most difficult to determine the correct standing position.

2. Significant differences in the level of knowledge which were observed between Stages I and II of the study confirmed the necessity to spread health education among patients with radicular syndrome.

3. Systematically conducted health education results in a considerable increase in the level of knowledge of the problems pertaining to the prevention of the recurrence of the disease and constitutes a basis for shaping self-care in patients with radicular syndrome.

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SUMMARY

The aim of the study was to determine the level of health education among 45 patients with radicular syndrome – 21 males and 24 females aged 23-64. The level of health education was measured twice: prior to and after health education. At Stage I of the study the level of knowledge was generally low, the mean percentage of correct answers to all questions being 43.0%; whereas at Stage II this percentage was significantly higher, the level of knowledge was defined as satisfactory and increased by 33.4% reaching the value 76.5%. The highest level of knowledge was observed with respect to the principles concerning lifting and handling loads, as well as leaning; while the lowest level – with respect to the correct standing position, both during the first and the second measurement (slightly over 50% of respondents correctly described this position).

Edukacja zdrowotna chorych z zespołem korzeniowym

Badania przeprowadzono na grupie 45 osób (21 mężczyzn i 24 kobiet) z zespołem korzeniowym, w wieku od 23 do 64 lat, w celu określenia poziomu edukacji zdrowotnej wśród chorych z tym zespołem. Badanie poziomu wiedzy zdrowotnej było prowadzone dwukrotnie, przed podjęciem zadań edukacyjnych i po edukacji. Stwierdzono, że w pierwszym badaniu poziom wiedzy był generalnie niski, skoro średni odsetek badanych odpowiadających prawidłowo na wszystkie pytania w pierwszym pomiarze wyniósł 43,0%, zaś w drugim – zdecydowanie wyższy, określony jako dobry, ponieważ wzrósł o 33,5%, dochodząc do 76,5%. Najwyższy poziom wiedzy obserwowano w zakresie zasad dotyczących podnoszenia i dźwigania ciężarów oraz zasad obowiązujących przy pochylaniu się, zaś najniższy – co do prawidłowej pozycji stojącej, zarówno w pierwszym, jak i w drugim pomiarze (nieco ponad połowa badanych umiała ją poprawnie scharakteryzować).