



PREVENTION OF DORSALGIA IN WORKERS AUTO INDUSTRIAL COMPLEX

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✓ Resume

In the automotive industry complex Uzavtomotors, the annual number of workers with back pain averaged 1400 requests per year. Explanatory work was carried out among the workers of the automotive industry on the prevention of back pain in the workplace. In the next 9 months, the treatment rate of workers with back pain was analyzed. 320 workers applied. Of those who applied, 301 (94.1%) did not comply with preventive measures, and the remaining 19 (5.9%) complied with preventive measures, but the aggravation of back pain in them did not occur at work.

Keywords: dorsopathy, dorsalgia, back pain, workers in the auto industrial complex, prevention.

AVTOMOBIL ISHLAB CHIQRISH MAJMUASI ISHCHILARIDA DORSALGIYANI PROFILAKTIKASI

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"O'zavtomotors" avtomobilsanoat majmuasida bel og'rig'i bilan og'riqan ishchilarning yillik murojaati yiliga o'rtacha 1400 tani tashkil etadi. Avtomobilsozlik sohasi xodimlari o'rtasida ishda bel og'rig'ining oldini olish bo'yicha tushuntirish ishlari olib borilib keyingi 9 oyda, bel og'rig'i bilan og'riqan ishchilarning murojaatlar soni tahlil qilindi. 320 nafar ishchi murojaat qildi. Murojaat qilganlarning 301 nafari (94,1%) profilaktik chora-tadbirlarga rioya qilmagan, qolgan 19 nafari (5,9%) profilaktika choralarini amalga oshirgan, bel og'rig'ining kuchayishi ish joyidan tashqarida kuzatilgan.

Kalitso'zlar: dorsopatiya, dorsalgia, belog'rig'i, avtosanoatxodimlari, profilaktika.

ПРОФИЛАКТИКА ДОРСАЛГИЙ У РАБОТНИКОВ АВТОПРОМЫШЛЕННОГО КОМПЛЕКСА

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✓ Резюме

В автопромышленном комплексе Uzavtomotors ежегодная обращаемость работников с болями в спине в среднем составляла 1400 обращений в год. Среди работников автопромышленного комплекса была проведена разъяснительная работа по профилактике болей в спине на производстве и в последующие 9 месяцев и анализировалась обращаемость работников с болями в спине. Обратилось 320 работников. Из обратившихся 301 (94,1%) не соблюдали профилактические мероприятия, а остальные 19 (5,9%) соблюдали профилактические мероприятия, но обострение болей в спине у них возникло не на производстве.

Ключевые слова: dorsopatii, dorsalgii, боль в спине, работники автопромышленного комплекса, профилактика.

Relevance

According to statistics, 80% of the world's population suffers from back pain. A third of the population (28.4%) aged 18–70 years experience recurrent back pain, 89% have had a relatively long episode of back pain at least once during their entire life [3, 4, 6]. In the United States, back pain ranks first in the structure of rheumatic diseases among the adult population. Pain in the lumbar region is one of the main reasons for visiting a specialist and receiving a certificate of incapacity for work in people of different ages. In Europe, this reason is the second in the frequency of visits to a doctor [8, 9, 10].

When analyzing the primary appeal to general practitioners for acute pain in the lumbosacral region, its causes (musculoskeletal pain) are identified in the vast majority of patients - in 70% of cases [1, 2].

Risk factors for developing back pain can be divided into adjustable, which can be eliminated, and uncorrected (heredity, age, gender).

Adjustable risk factors:

- professional (hard physical work, static loads on the spine, monotonous physical labor, including frequent forward bends and body turns; work accompanied by vibration processes);
- psychosocial (muscle distress caused by being in conditions of acute and (or) chronic stress);
- individual somatic characteristics (for example, stoop due to the weakness of the muscular corset and the lack of regular exercise);
- individual physical characteristics (unnatural body position, monotonous stereotyped movements, static posture, etc.);
- influence of meteorological factors (local and general hypothermia, pressure drops);
- inappropriate nutrition, overweight;
- smoking, alcohol abuse.

Thus, the factors described above are quite widespread, but can be eliminated, or at least their effect can be limited by the duration of exposure. Against the background of such predisposing factors, hypothermia, awkward movement, and an acute stressful situation are enough to form a pain syndrome [7].

In Russia, the rules on labor protection during loading and unloading operations and the placement of goods, in order to preserve the health of workers, have established maximum permissible norms for a single lifting (without moving) weights: by men, no more than 50 kg; women - no more than 15 kg. In addition, there are additional standards "On new norms of maximum permissible loads for women when lifting and moving heavy weights manually", since the said decree established norms for lifting and moving heavy weights: when alternating with other work (up to 2 times per hour): men up to 30 kg; women - up to 10 kg; constantly during the work shift: for men up to 15 kg; women - up to 7 kg [5].

The aim of the research: to assess the effectiveness of preventive measures for back pain in workers in the auto-industrial complex.

Material and methods

Explanatory work on the prevention of back pain in the workplace was carried out among the workers of the auto-industrial complex.

Prevention of back pain in the workplace are:

1. Correctly lift weights: lift the load not abruptly, due to the load of the large muscles of the legs, and not the extension of the back.
2. Wearing a support belt (lumbosacral corsets).
3. Maintaining a healthy weight. Overweight people are at greater risk of back pain, joint pain and muscle tension than those who are not overweight.
4. Rest and sleep in a position that maintains the natural alignment of the spine.
5. Maintaining good posture. Correct posture and body mechanics result in less pressure on the intervertebral discs and less stress on the muscles, ligaments and joints of the back.
6. Reducing stress and prerequisites for its occurrence. Stress increases tension in all muscles, including the back muscles.
7. Maintain flexibility of the spine and joints. Sports, swimming, yoga.

During the year, the medical unit monitored the production of patients with back pain. According to the anamnestic data, the causes of back pain were identified and, on the basis of this, the effectiveness of the preventive measures we carried out among the workers was determined.

Results and its discussion

The car company UzavtomotorsAsaka employs 8,860 workers. According to the data of the card index of the medical unit for 2018-2020, the medical unit received 4280 calls from workers with back pain (on average, 1416 calls per year). After explanatory work on the prevention of back pain for 9 months of 2019, 320 workers turned to the medical unit with back pain. Of these, there were 195 men and 125 women. The average age was 38.5 ± 1.2 years. According to the anamnesis, it was revealed that among the factors in the development of back pain, performance of work with a significant static and dynamic load on the muscles of the trunk, legs and arms was distinguished - in 77 (24.1), as well as lifting and displacement of weight, as well as its total mass load - in 80 (25%), frequent and deep bending of the trunk, twisting of the trunk during work - in 79 (24.7%), forced working posture, including prolonged sitting with a constant working posture - in 57 (17, 8%), as well as the impact of general vibration - in 32 (10%). In addition, hypothermia was noted as a provoking risk factor - 75 (23.4%) and chronic stressful situations in 50 (15.6%) patients.

It turned out that among 320 patients who applied to the medical unit, 301 (94.1%) did not comply with preventive measures. The remaining 19 (5.9%) followed preventive measures, but the aggravation of back pain in them did not occur at work.

Conclusion

Thus, compliance by workers with a set of preventive measures for back pain at work reduces the appearance and recurrence of dorsalgia. And in non-working hours, playing sports, swimming, yoga strengthens the muscle frame, strength and endurance of the muscles of the trunk, increases the flexibility of the spinal column, thereby increasing the load resistance of production workers.

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