

## STRATEGIES OF COPING WITH PAIN — DIFFERENCES ASSOCIATED WITH THE HISTOLOGICAL TYPE OF LUNG CANCER

Jacek Polański<sup>1</sup>, Beata Jankowska-Polańska<sup>2</sup>, Mariusz Chabowski<sup>2</sup> Grzegorz Mazur<sup>3</sup>, Joanna Rosińczuk<sup>2</sup>

<sup>1</sup>Lower Silesian Oncology Center, Home Hospice, Wrocław, Poland

<sup>2</sup>Department of Clinical Nursing, Faculty of Health Science, Wrocław Medical University, 5 Bartla Street, 51-618 Wrocław, Poland.

<sup>3</sup>Department of Internal Medicine, Occupational Diseases, Hypertension and Clinical Oncology, Wrocław Medical University, 213 Borowska street, 50-556 Wrocław, Poland

The experience of lung cancer includes a negative impact of the disease on both physical and psychological health. Pain is one of the negative experiences associated with lung cancer. Cognitive behavioral therapy techniques are often recommended as treatments for lung cancer-related pain. The aim of this work was to analyze the strategies of coping with pain in relation to the histological type of lung cancer.

**Material:** Two groups: I (n=72) small cell lung carcinoma (SCLC); II (n=185) non-small cell lung carcinoma (NSCLC). Pain was evaluated using a VAS scale, while strategies for coping with pain were analyzed using the Coping Strategies Questionnaire (CSQ).

**Results:** The two groups differed in terms of the pain levels they experienced:  $4.8 \pm 2.0$  in group I vs.  $4.2 \pm 2.0$  in group II;  $p=0.003$ . The analysis of coping strategies showed that patients in group I were less likely than those in group II to use the strategy of increasing behavioral activity ( $13.6 \pm 7.0$  vs.  $16.9 \pm 6.9$ ;  $p=0.001$ ), and active coping strategies: pain control ( $2.5 \pm 1.2$  vs.  $3.4 \pm 1.2$ ;  $p<0.001$ ) and ability to decrease pain ( $2.4 \pm 1.3$  vs.  $3.5 \pm 1.3$ ;  $p<0.001$ ). In group I, the most commonly used strategy was a cognitive one: praying/hoping ( $19.4 \pm 6.3$  vs.  $16.5 \pm 6.9$ ;  $p=0.005$ ). Other strategies were used with similar intensity. Correlation analysis for coping strategies and pain intensity showed a positive impact (increased pain) for the following domains: diverting attention ( $r=0.264$ ,  $\beta=0.93$ ); reinterpretation of pain sensations ( $r=0.327$ ,  $\beta=0.97$ ); catastrophizing ( $r=0.383$ ,  $\beta=1.11$ ); ignoring pain sensations ( $r=0.306$ ,  $\beta=0.93$ ), praying/hoping ( $r=0.220$ ,  $\beta=0.76$ ), coping self-statements ( $r=0.358$ ,  $\beta=1.10$ ), and increased behavioral activity ( $r=0.159$ ,  $\beta=0.57$ ). For domains indicating an ability of coping with pain and decreasing pain: pain control ( $r=-0.423$ ,  $\beta=-0.27$ ) and ability to decrease pain ( $r=-0.359$ ,  $\beta=-0.27$ ), a negative impact was found (decreased pain).

**Conclusions:** In the SCLC group, the most commonly used strategy was praying/hoping, while in the NSCLC group, the most common strategies were increased behavioral activity and active coping. Active coping strategies (pain control and decreasing pain) are a statistically significant independent factor associated with decreased pain intensity.