

Evaluation of Multiple Symptoms in Adolescents Undergoing Antineoplastic Chemotherapy

Avaliação de Múltiplos Sintomas em Adolescentes Submetidos à Quimioterapia Antineoplásica

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Dear editor,

Cancer patients often report multiple symptoms arising from the disease or related to the toxicity of the antineoplastic treatments to which they are subjected. The prevalence, intensity, importance perception and impact of these symptoms on the life quality and daily activities present great variability among patients and are influenced by the disease and treatment stages⁽¹⁾. The symptoms evaluation, therefore, is fundamental throughout cancer therapy, since it allows identifying complications early, minimizing and even preventing possible changes in patients' functional capacity⁽²⁾.

In this sense, attention to symptoms' combinations or groupings is more important than treating them in isolation, since simultaneous symptoms probably have a multiplicative nature and catalytic effect on each other⁽³⁾. The symptom cluster concept - a description of two or more related concomitant symptoms that are capable of creating symptomatic patterns and classifications - has been highlighted in Oncology research, especially in Oncological Nursing, which shows the potential to base the systematization of care⁽⁴⁾.

Systematic review recently published, recommended the development of Nursing studies on clusters of symptoms⁽⁴⁾. Therefore, a sectional study, whose main objective is to identify symptoms clusters in adolescents submitted to antineoplastic chemotherapy during hospitalization, was delineated and is being conducted by teaching nurses at a university hospital located in the city of Rio de Janeiro, RJ, Brazil. In this letter, preliminary results are presented on the presence and intensity of multiple symptoms in the first individuals selected for participation in this study.

In November 2017, after signing the Term of Free and Informed Consent (FICT) and approval of the Research Ethics Committee of the hospital where it is being developed, six hospitalized adolescents (four males) diagnosed with hematological malignancies (five with acute lymphoid leukemia), and ages ranging from 13 to 17 years (mean = 14.8) were interviewed by a trained nurse 24 hours after administration of the first cycle of intravenous chemotherapy. The Brazilian version of MD Anderson Symptom

Inventory - MDASI⁽¹⁾ was used to evaluate the presence and intensity of 13 symptoms experienced by the adolescent in the last 24 hours. Among them, there were pain, worries and drowsiness, experienced by four adolescents. On a scale ranging from zero to 10⁽¹⁾, concerns and sleepiness were the symptoms that presented the highest averages of intensity (= 5.2), followed by nausea, sleep problems and shortness of breath = 4.5.

Brazilian study developed with adolescents with cancer who presented two or more simultaneous symptoms evaluated by the MDSAI with an average greater than or equal to three identified the following clusters: Gastrointestinal symptoms (nausea, vomiting and lack of appetite), Pain (drowsiness and sleep problems) and Fatigue - tiredness, dry mouth, sadness, shortness of breath and worries. All of them were equivalent in the factorial and hierarchical cluster analyzes, in which they presented adequate psychometric properties, thus suggesting their existence in adolescents with cancer⁽⁵⁾.

The symptoms that presented the highest intensity means in this study collaborated in the all clusters composition identified in the previously mentioned study⁽⁵⁾. Although cautious, it is believed that these symptoms will possibly contribute to the similar clusters formation in the present study because of their high intensity averages.

Considering that multiple symptoms are associated with worse prognoses, including lower survival rates, reduced compliance to treatment and poorer life quality⁽⁶⁾, it is hoped that the final results of this ongoing study will contribute not only to a better symptoms clusters understanding in adolescents with cancer, but also to support the care provided to this population. Thus, oncological nurses and other professionals in the field may propose more effective interventions for the control of symptoms based on their interactive nature.

References

1. Ferreira KASL, William Jr. WN, Mendonza TR, Kimura M, Kowalski LP, Rosenthal DI, et al. Tradução para a língua portuguesa do M.D.

Anderson Symptom Inventory – head and neck module (MDASI-H&N). Rev Bras Cir Cabeça Pescoço [Internet]. 2008 [access in 2018 Jan 24]; 37(2):109-13. Available from: http://www.sbccp.org.br/wp-content/uploads/2014/11/art_115.pdf.

2. Kolankiewicz ACB, De Domenico EBL, Lopes LFD, Magnago TSBS. Validation of the M.D. Anderson Cancer Center Symptom Inventory for the Portuguese language. Rev Esc Enferm USP [Internet]. 2014 [access in 2018 Jan 24]; 48(6):999-1005. Available from: http://www.scielo.br/pdf/reeusp/v48n6/pt_0080-6234-reeusp-48-06-0999.pdf.

3. Hoffman AJ, Given BA, von Eye A, Gift AG, Given CW. Relationships among pain, fatigue, insomnia and gender in persons with lung cancer. Oncol Nurs Forum [Internet]. 2007 [access in 2018 Jan 24]; 34(4):785-92. Available from: <https://onf.ons.org/onf/34/4/relationships-among-pain-fatigue-insomnia-and-gender-persons-lung-cancer>.

4. Boeiras SF, Guimarães RM, Acioli LR, Stipp MAC. Cluster of symptoms and cancer in nursing research: systematic review. Rev bras cancerol [Internet]. 2014 [access in 2018 Jan 24]; 60(4):351-61. Available from: http://www.inca.gov.br/rbc/n_60/v04/pdf/10-revisao-de-literatura-cluster-de-sintomas-e-cancer-na-pesquisa-em-enfermagem-revisao-sistemica.pdf.

5. Simberg ARF. Cluster of symptoms in adolescents with cancer [Dissertation]. Guarulhos: Universidade de Guarulhos; 2011.

6. Rodgers CC, Hooke MC, Hockenberry MJ. Symptom clusters in children. Curr Opin Support Palliat Care [Internet]. 2013 [access in 2018 Jan 24]; 7(1):67-72. Available from: <https://insights.ovid.com/pubmed?pmid=23108342>.