

The Role of Psychiatry in Quality of Life in Young Patients with Lung Cancer

Bakht Siddiqui, MD
Zed Shabbir, DO
Majd Soudan, MBBS
Orna Alpert, MD

Vassar Brothers
Medical Center

Nuvance Health



Introduction

- Lung cancer is the first leading cause of tumor-related mortality with approximately 1.38 million deaths occurring worldwide every year¹.
- AC is usually diagnosed in patients in the 6th and 7th decades of life, with less than 5% seen in patients below the age of 50 and even fewer below the age of 40.
- The diagnosis and treatment of lung cancer in young adults have unique health and psychosocial challenges.
- Younger patients are at the peak of reproductive years, infertility resulting from chemotherapy is an important consideration.
- May be faced with psychological and emotional issues, as the diagnosis rises at a time where rapid changes in cognitive and emotional development transpire.

Case Presentation

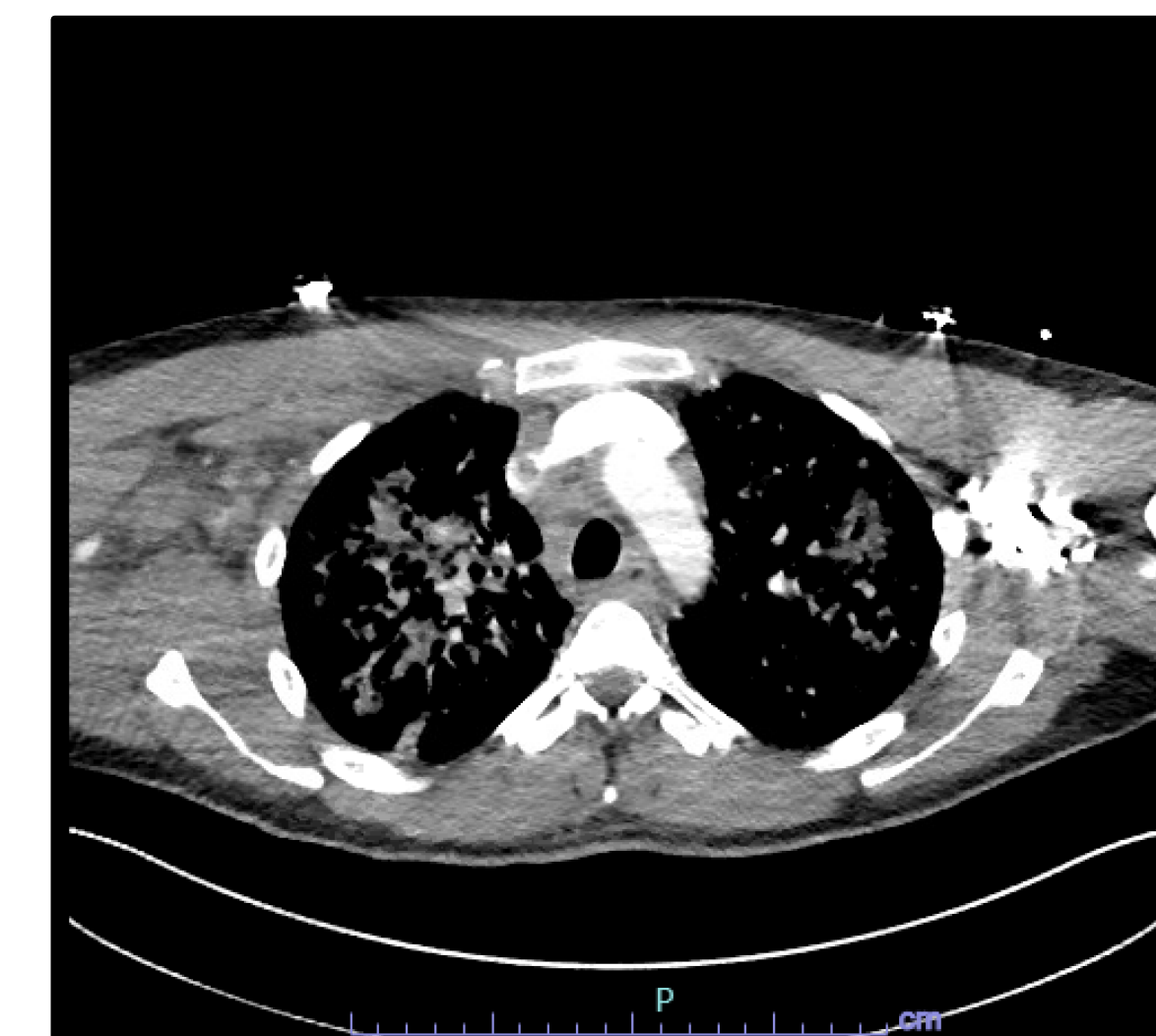
- 28 year old male with a recent diagnosis of metastatic adenocarcinoma of the lung with mucinous and signet ring cell features presenting to our ED with complaints of cough, poor sleep, night sweats and a 15 lb. unintentional weight loss.
- Day 14 of admission, our team consulted to evaluate for suspected depression and anxiety.
- Noted to be wearing a "Do Not Resuscitate/Do not intubate" bracelet on his hand. When asked about this, he stated he made a decision to not be resuscitated due to his physical distress.
- Endorses inability to fall asleep and maintain sleep due to anxiety and persistent cough. Also reported significant feelings of loneliness from isolation in the hospital and lack of visitors due to his COVID 19 status.
- Reported suffering longstanding depression since he was removed from his home during early childhood and placed in numerous foster homes. Felt despondent due to his cancer diagnosis and said "have I not suffered enough already?".

Mental Status Exam

- Tall, cachectic male with missing upper front teeth.
- Cooperative with downcast eyes. Speech was fluent and he described his mood as "hopeless" with a congruent, dysphoric affect that was constricted in range. Able to express his thoughts in a linear fashion and he denied suicidal and homicidal ideation.
- Alert and oriented x 3 with grossly intact cognition, memory, attention and concentration.
- Appeared to minimize his depressive symptoms and was dismissive of questions regarding his emotional response to his cancer diagnosis.

Course

- Lexapro 10 mg titrated to final dose of 15 mg. Gabapentin 300mg titrated to final dose of 600 mg BID. Due to psychomotor agitation accompanied by respiratory distress and restlessness, Zyprexa 2.5 mg was started but quickly discontinued due to a dystonic reaction. Seroquel 50 mg was started which resulted in an improvement in his anxiety and insomnia and was titrated to a final dose of 100 mg HS.



Quality of Care

- It is apparent that acceptance and emotional support were the most important in improving QOL in patients with advanced lung cancer, while denial and self blame lead to negative effects⁴.
- Depression in patients with lung cancer adds burden during treatment, resulting in low motivation and compliance with treatment⁵.
- Satisfaction with life was negatively affected by being a non smoker, having chest pain, longer duration of illness, side effects during treatment and high degree of physical disability⁶.
- Patients with a negative family history of cancer showed a greater satisfaction.
- The use of extensive coping strategies perhaps means regaining control over one's life

Psychological Manifestations of Lung Cancer

- Patients with lung cancer continue to experience the burden of symptoms despite significant advances in treatment which can greatly impact a patient's quality of life (QOL)².
- Major depression is common in cancer patients and its prevalence is 4 times higher than that of the general populations³.
- The anxiety develops from fear of death, fear of pain, fear of losing control of one's body, fear regarding anesthesia, fear about social outcomes such as losing one's ability to work, and disruption in the hope routines.

Coping Mechanisms

- Include but not limited to progressive relaxation exercises, deep breathing exercises, distraction using visual and auditory techniques, imagery, music therapy, hypnosis, biofeedback and aromatherapy.
- Laughter, spontaneous or as part of therapy, was observed to improve respiratory and circulatory system functioning via stimulation of the hypothalamus. Also decreases muscle tension via endorphin production⁷.
- It was apparent that pain has a significant influence on adjustment to illness, especially in end stage disease. Pain affects 90% of patients with lung cancer, making selection of pain management important⁸.

Conclusions

- Young patients with NSCLC have poorer survival rates compared to older patients with NSCLC.
- Receiving a lung cancer diagnosis is difficult at any age but is exceptionally devastating to young patients.
- Adjustment disorder, anxiety and major depressive disorder are commonly seen.
- The medical staff, including physicians and nurses, have an important role in recognizing emotional difficulties and addressing them.
- Depression and anxiety are important predictors of QOL in patients with NSCLC, which has a significant impact on survival.
- Early psychiatric intervention can improve quality of life.

References

1. Chapman, A.M., Sun, K.Y., Ruestow, P., Cowan, D.M., Madl, A.K., 2016. Lung cancer mutation profile of EGFR, ALK, and KRAS: meta-analysis and comparison of never and ever smokers. *Lung Cancer* 102, 122–134. <https://doi.org/10.1016/j.lungcan.2016.10.010>
2. Benedict, C., Shuk, E., Ford, J.S., 2016. Fertility issues in adolescent and young adult cancer survivors. *J. Adolesc. Young Adult Oncol.* 5 (1), 48–57. <https://doi.org/10.1089/jayao.2015.0024>
3. Shoval, G., Balicer, R.D., Feldman, B., Hoshen, M., Eger, G., Weizman, A., Zalsman, G., Stubbs, B., Golubchik, P., Gordon, B., Krivoy, A., 2019. Adherence to antidepressant medications is associated with reduced premature mortality in patients with cancer: a nationwide cohort study. *Depress. Anxiety* 36 (10), 921–929. <https://doi.org/10.1002/da.22938>
4. van de Wiel, M., Derijcke, S., Galdermans, D., Daenen, M., Surmont, V., De Droogh, E., Lefebure, A., Saenen, E., Vandenbroucke, E., Morel, A.M., Sadowska, A., van Meerbeeck, J.P., Janssens, A., 2021. Coping strategy influences quality of life in patients with advanced lung cancer by mediating mood. *Clin. Lung Cancer* 22 (2), e146–e152. <https://doi.org/10.1016/j.clc.2020.09.010>
5. Hopwood, P., Stephens, R.J., 2000. Depression in patients with lung cancer: prevalence and risk factors derived from quality-of-life data. *J. Clin. Oncol.* 18 (4), 893–903. <https://doi.org/10.1200/JCO.2000.18.4.893>
6. Genc, H., Saritas, S., 2020. The effects of watching comedy videos on anxiety and vital signs in surgical oncology patients. *ExplorPolan'ski, J., Chabowski, M., S'wia'oniowska-Lonc, N., Jankowska-Polan'ska, B., Mazur, G., 2020 Nov. Can life satisfaction be considered a predictor of quality of life in patients with lung cancer? Eur. Rev. Med. Pharmacol. Sci.* 24 (21), 11128–11138. https://doi.org/10.26355/eurrev_202011_23600. PMID:33215430
7. e 16 (6), 401–406. <https://doi.org/10.1016/j.explore.2020.02.009>
8. Czerw, A.I., Religioni, U., Deptala, A., 2016. Adjustment to life with lung cancer. *Adv. Clin. Exp. Med.* 25 (4), 733–740. <https://doi.org/10.17219/acem/61014>