A Case Study on Lung Cancer: Proceedings of 3rd International Meeting of Clinical Practice Guidelines in Oncology

N. Preethi Seshadri*, Anita Ramesh**, M.G. Rajanandh***, P. Seenivasan***

Author's Affiliation: *Assistant Professor, Department of Pharmacy Practice, Hindu college of Pharmacy, Guntur, Andhra Pradesh 522002, India. **Professor and Head, Department of Medical oncology, Saveetha Medical College and Research Center, Saveetha University, Chennai, Tamil Nadu 600077, India. ***Assistant professor ****Professor and Head Department of Pharmacy Practice, Faculty of Pharmacy, Sri Ramachandra University, Porur, Chennai, Tamil Nadu 600116, India.

Corresponding Author: M.G. Rajanandh, Assistant professor, Department of Pharmacy Practice, Faculty of Pharmacy, Sri Ramachandra University, Porur, Chennai, Tamil Nadu 600116, India.

E-mail: mgrpharm@gmail.com

Received on 07.10.2017, Accepted on 01.06.2018

Abstract

Third International Meeting of Clinical Practice Guidelines in Oncology-2014 and Indian Perspectives was conducted on December 20th 2014. The conference was organized by the unit of medical oncology, Sri Ramachandra University and Hospital, Porur, Chennai, India. Eminent people like oncologists, pathologists, radiologists, pediatric oncologists, medical practitioners, surgeons and about 500 delegates from all over the India participated and worked together to discuss treatment guidelines for most cancers such as colorectal, central nervous system, gastric, lung, renal cell, hepatocellular carcinoma, breast sarcomas, pancreas, pediatric, gynecological, hematological malignancies and supportive care. Of which, a case study of lung is discussed in this paper.

Keywords: Case Study; Lung Cancer; Clinical Practice.

Introduction

According to National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) 2010 report, lung cancer is the second most common cancer worldwide, in both males (accounting 15% of all cancer) and females (accounting 14% of all cancer) and it is the most common cause of cancer death worldwide (Longo, 2012). In India, approximately 63,000 new lung cancer cases are reported each year

(Ganesh et al., 2011). Compared to western population, epidemiological study shows there are increased prevalence of lung cancer in Indian population (Jagadish et al., 2009).

Based on our Hospital Based Cancer Registry (HBCR) 2012, lung cancer is the most common cancer in both males (19.7% of all cases) and females (15.1% of all cases). Lung cancer has been the most common malignancy in both males and females in our state for the past decade contributing approximately 16-20% of all malignancies. Lung cancer is almost exclusively a smoker's disease and both incidence and mortality are directly related to the degree of cigarette use that occurs in a population (Wingo et al., 1999). The followings are the case studies discussed on head and lung cancer.

Case Study

A 65 years old male diabetic, Cardiac problems, on blood thinners, good general condition, Presented with history of cough, routine check shadow in the lung and non-smoker.

Panelists Discussion

- The Preferable investigation is CT- scan.
- The PET should notdone prior to diagnosis.
- If it is clearly an operable lung cancer, he will take up a surgery then tissue diagnosis is preferable.
- Intra operative confirmation of the malignancy and proceed with Lobectomy and definitive mediastenal lymph node dissection.

- Will go to PET scan first followed by guided biopsy.
- CT-SCAN is preferred followed by once the diagnosis is established then go ahead with planned treatment.
- CT-guided biopsy must be done, if it is positive then PET, CT scan must be performed.
- If the PET, CT is negative and nodes are descrute then endoscopic alteration aspiration (EBUS) is performed.
- If there is clinically nodes available, then surgery is performed.
- If no nodes are available, then surgery is performed.
- ❖ The accuracy of Mediastenoscopy and Endobronchealultrasonograpy is 100%.
- Endobroncheal assessment of mediasternum can be done.
- A patient on Cardiac problems on , what would be optimum investigation to do surgery for patient.
- Ejection fraction (44 perset).
- PFT, DLCO ventilation perfusion, scan, maximum oxygen consumption capacity.
- If PFT, DLCO are adequate, Predicted then they can do procedures.
- According to NCCN guidelines if there is only lesion, Surgery is best option provided there are no co morbidities cardiac and other condition which makes unfit.
- What are surgical procedures that must be preferred?
- Lobectomy is preferred.
- Combo therapy with radio frequency and radiation can be curable.
- ❖ When the patient cardiac condition is 20% and in operable, what is the remedy to be taken?
- Radiation is preferred and it is not advisable to open for surgery. When the lump is 2.8cm X 2 cm.
- Lower Lobectomy themediasternal sampling is done, excellent recovery and the histology says.
- Whether adjuvant is role?
- Adjuvant therapy is needed.
- ❖ If his cardiac function is 20%, he is inoperable.
- Do you have other treatment?
- Radio frequency ablationespecially when PFT is altered.
- Chemotherapy, radiotherapy followed by radiation,

- Survival rate is more.
- ❖ If you do to radio Frequency 1st (RFA) alone, it will be 50%, radiofrequency with combination with radiofrequency 80%.
- Final Statement, In an early lung carcinoma, if the patient is medically fit, patient, should undergo surgery.
- The preferred surgery is lobectomy to sub-lower dissection.
- Re-Biopsy for molecular study

EGFR Mutation and Alk mutation.

Conclusion

By studying the cases of lung cancer in the conference the present Indian scenario of treatment is understood. By this study we came to know that working together to discuss treatment guidelines for most cancers and accuracy of the diagnosis, will improve the quality, effectiveness and efficiency of cancer care in the country. Most of the panelists opted for the surgery based on the cancer stage and in some cases mutation and ablation therapy due to the unavailability of Randomized controlled trails

Reference

- 1. Ganesh B, Sushama S, Monika S, et al. A case-control study of risk factors for lung cancer in Mumbai, India. Asian Pac J Cancer Prev, 2011:12,357-62.
- Anita Ramesh, M.G. Rajanandh, A. Vivenkanandan, Y. Sujitha, Y BalaBhaskar, C.K. Keerthi and Sai M.V. CharanTeja. Pattern of Complementary and Alternative Medicine Use in Cancer Patients: Prospective Analysis of Medical Oncology Unit. Academic Journal of Cancer Research 2015;8(2): 40-42.
- 3. Anita Ramesh, M.G. Rajanandh, S. Thanmayee, G. SalaghaMerin, S. Suresh, K. SatishSrinivas. Impact of patient counseling on medication adherence, beliefs and satisfaction about oral chemotherapies in patients with metastatic cancer at a super speciality hospital. International Journal of Cancer Research 2015;11(3): 128-135.
- 4. Jagadish R, Girish S, Dushyant G, et al. Clinicopathological profile of lung cancer in Uttarakhand. Lung India, 2009;26:74-6.
- 5. Anita R, Rajanandh MG. US-FDA approved chemotherapy drugs in 2014. Indian Journal of Cancer Education and Research 2015;3(1):27-29.
- 6. Rajanandh MG, Suresh S, Suganya K, Vidhyalakshmi T, Sudharsan M, Thamilselvi S. Drug Utilization

- Review of Anticancer Drugs in Medical Oncology Department of a Tertiary Care Teaching Hospital. Indian Journal of Cancer Education and Research 2017;5(1):9-12.
- 7. Rajanandh MG, Chamundeeswari D. Need of Pharmacovigilance in AYUSH drugs. Journal of Pharmacovigilance 2017;5:e166.
- 8. Wingo PA, Ries LA, Giovino GA, et al. Annual report to the nation on the status of cancer, 1973-1996, with a special section on lung cancer and tobacco smoking. J Natl Cancer Inst, 1999;91:675-90.
- Rajanandh MG, Praveen Kumar V, Yuvasakthi S. Roles of Pharmacist in Pharmacovigilance: A Need of the Hour. J Pharmacovigil 2016;4:221. doi: 10.4172/2329-6887.1000221.

- 10. Karthik S, Seenivasan P, Rajanandh MG. Pattern of Chemotherapy induced Alopecia. Indian Journal of Cancer Education and Research 2016;4(2):45-47.
- 11. Rajanandh MG, Suresh S, Manobala K, Nandhakumar R, Jaswanthi G, Neha S. Prediction of cardiovascular risk in cancer patients of South India using WHO/ISH risk prediction charts and Framingham score A prospective study. J Oncol Pharm Pract. 2018 Jul;24(5):354-58.
- 12. Preethi NS, Anita R, Rajanandh MG, Samuel IB, Seenivasan P. A case series of hean and neck cancer: A conversation with giants and legends in oncology. Indian Journal of Cancer Education and Research. 2017;5(2):141-44.