Turning EGFR mutant NSCLC into a chronic disease: A perfect union between medical oncology and molecular pathology

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BACKGROUND

V.V. is a 50-year-old male from New Delhi, India. He presented to the thoracic oncology unit with the complaints of cough, and hemoptysis of 3 months duration.

The patient has a history of chronic smoking of ~20-pack years, and quit since 6 years.

PET-CT scan showed a right lung mass of 3x3 cm size along with multiple skeletal metastases.

CT-guided biopsy revealed a NSCLC carcinoma, morphologically favoring adenocarcinoma.

LEARNING GOALS

Goal 1: Ordaining the fact that biomarker testing is a mandate in all NSCLC patients irrespective of smoking status and histology.

Goal 2: Importance of broader panel based genomic testing albeit sequential sequencing strategy.

Goal 3: Recruiting the right patient into the right clinical trial with adequate counselling and shared decision making.

Goal 4: Importance of re-biopsy at disease progression, and repeat NGS to ascertain potential off-target resistance mechanisms to small molecule inhibitors.
CURRENT PRESCRIPTIONS

- No medications.

COMORBIDITIES/MED HX

- Empirical anti-tubercular treatment taken for 3 months.

OVERALL DIAGNOSIS

Non-small cell lung carcinoma, favor adenocarcinoma. Final diagnosis: adenocarcinoma, lepidic pattern.

TESTING

- PET-CT: Right lung mass of 3x3 cm size along with multiple skeletal metastases.

- CT-guided biopsy of right lung mass revealed NSCLC morphologically favoring adenocarcinoma.

- Immunohistochemistry revealed positive immunostaining for TTF1 and negative for p40, corroborating the adenocarcinoma histology.
THE AMAZING CASE RACE
CASE STUDY 18

BIOPSY

- NSCLC: adenocarcinoma, CK7+, TTF1+, p40 negative: Final diagnosis: adenocarcinoma, lepidic pattern.

Want to learn more about this case?

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