



LUNG CANCER IMMUNOTHERAPY CASE PRESENTATION

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CASE PRESENTATION

- A 69 years-old male with a medical history of HTN, HLD, Afib, OSA on CPAP
- Social Hx : Heavy Smoker (50 ppy), 1 quart of whiskey per week, no illicit drug abuse
- Family Hx: No significant history of cancer
- RUL nodule since 2015, monitor on surveillance CT's
- Sep.2017: mass increased in size “1.3 cm” and spiculated

CASE PRESENTATION

- Nov.2017 CT guided Lung biopsy: Poorly differentiated carcinoma with spindle cell changes
- Dec.2017 PET: Hypermetabolic 4.5cm RUL nodule and 3cm mass adjacent to tail of the pancreases
- Jan.2018 MRI of brain: Negative
- Jan.2018 CT guided pancreatic tail biopsy: Poorly differentiated carcinoma with spindle cell changes

CASE PRESENTATION

- Tumor board presentation: an oligometastatic disease
- Feb.2018 VATS lobectomy :
 - pT3pN0pM1b, Pleomorphic carcinoma; positive for cytokeratin 7, negative TTF-1,p63,cytokeratin 20
 - Negative for ALK/EGFR/ROS-1, no PDL-1 was checked
- March.2018 Distal pancreatectomy and splenectomy with regional lymph node dissection
 - Pleomorphic carcinoma of lung origin in the pancreas and spleen
 - Negative surgical margin
 - Negative lymph node involvement 0/14

CASE PRESENTATION

- April.2018: Admitted for worsening DOB, found to have progression of disease
 - PET scan with intensely FDG thought the body suggestive of widespread metastatic disease (liver, lung, peritoneum and skeletal) as well as lymph node in neck, chest ,pelvis
- May.2018 → Chemotherapy “Cisplatin + Etoposide”
- Re-staging after 3 cycles with clear disease progression
- June.2018 → Nivolumab
- Re-staging after 4 cycles → impressive response (7cm → 7mm)
- Re-staging after 8 cycles → show ongoing response

CASE PRESENTATION

- Nivolumab treatment had to be held due to ongoing progressed worsening kidney function
 - Prednisone 0.5mg/kg daily in Feb.2019 → improved, off steroid in April.2019
- Re-staging in May.2019 continue response with further decrease in size of hepatic lesions
- Re-start Nivolumab in June.2019
- Re-staging CT's in Sep.2019 with increase in right hepatic lesion
- SBRT (5 fractions) Sep.2019-Oct.2019
- Re-staging Nov.2019 → improvement and no evidence of active disease

PULMONARY PLEOMORPHIC CARCINOMA

- Pulmonary Pleomorphic Carcinoma (PPC) is a rare type of the non-small cell lung cancer, 0.1-0.4% of all lung cancer
- Aggressive behavior and resistant to chemotherapy and radiotherapy
- No established treatment other than surgical resection
- Few cases reports have been published for treatment with chemotherapy, none have proven the efficacy of these regimens
- Multiple cases have been report with use of Nivolumab or Pembrolizumab with rapid and long term response

PULMONARY PLEOMORPHIC CARCINOMA

- PPCs express high levels of PDL-1 suggesting the potential efficacy of immune checkpoint inhibitors in these tumors
- PD-L1 was found to be imperfect as a predictive of the efficacy of the immune checkpoint inhibitor
- These case is one among few and random case reports , showing an immune checkpoint inhibitor is effective in PPC
- However, the duration of immunotherapy efficacy is unknown
- A Large population is required to confirm the efficacy of immunotherapy for PPC.

QUESTIONS ?

REFERENCES

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