Original Research Paper

Volume - 12 | Issue - 04 | April - 2022 | PRINT ISSN No. 2249 - 555X | DOI : 10.36106/ijar

Pathology

MULTIPLE SECONDARIES; OBSCURE PRIMARY

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KEYWORDS :

BACKGROUND:
Cancer of the lung is one of the major causes of death in many countries around the world and the leading cause of cancer-related death in industrialized countries without any sex, race or religion usually after 5th decade.

For clinical purposes lung cancer was classified into "small cell" and "non–small cell" carcinoma. With the recent development of personalized medicine and targeted therapies, this simplified stratification scheme is being vigorously revised with the understanding that more specific subtyping of the non–small cell group is required.

Case report:
57 yrs, Male, a battery operator by profession in a small car shop, working since last 40 yrs. H/O, Pulmonary TB, 13 yrs ago, had feverishness, malaise body ache and pain on the right side of chest for 3 months, for which he was treated with symptomatic treatment, were hospitalized for few days and H/O taking medication with pain killer, antibiotic, minerals and vitamin support, also had H/O progressive loss of weight, gradual weakness, loss of appetite. Following that he was admitted in our hospital.

O/E: General condition was grossly emaciated, weak, Anemic, pulse rate was 78/m, B.P 160/80 mm Hg. Spo2 98% at RA. By the time he complains of tingling and numbness of right leg with restriction of movement of the same side. Observing his general physical condition he was sifted to ICU for 2 days and investigation went on. A small swelling was noted on right side of chest wall of size 2x2x1 cm approx. Another irregular swelling was noted on left flank of size 5x5x4 cm approx which had irregular borders, fixed, non tender and skin over the swelling appeared to be normal. On CT scan of abdomen a pelvic mass was noted of size 7x5x4 cm.

Investigations:
Hb 7.4g/dl with TC-13.6 thousand/mm3. ESR-60mm/hr N 95 L3M01 E1 B0 ,lPlatelet-3 lakhs/mm3,Rbc-2.5 million/mm3,PCV-23.4,MCV-90.7fl ,MCH-29.1pg ,MCHC-32.1g/dl. PBS showed marked microcytic, hypochromic type of anemia without other abnormality.Na-130.93,k-4.63. Urea-35.5mg/dl,creatinine-0.51mg/dl,total protein-6.02mg/dl,Albumin-2.19gm/dl,Globulin-3.23gm/dl,Total bilirubin-1.53mg/dl,Bilirubin unconjugated-0.54mg/dl. ICTC-Non reactive

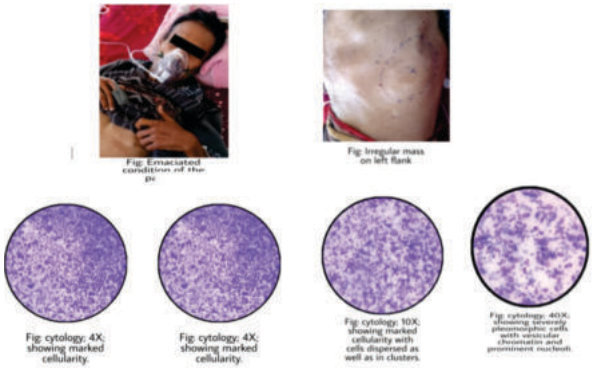
CXR: opacities in the right lung.
CT Scan Whole abdomen & Thorax: Multiple rounds to oval shaped varying sizes and random distribution noted in bilateral lung fields, more on the right side. Diffuse ground glass opacities and interlobular septal thickening noted in right lower lobe and peripheral aspect of left lower lobe. Left sided minimal loculated pleural effusion noted.

HRCT of thorax was performed few days later which showed features suggestive of ILD with evidence of pulmonary effusion On echocardiography-Normal pericardium, normal LV systolic function, EF-74% was found.

CYTOLOGY:
1. FNAC was done from left flank swelling
2. An USG Guided FNAC was done from the pelvic mass

REPORT:
Cytology summary of both the smears show marked cellularity with both clustered and dispersed cells. The cells show severely pleomorphic vesicular nuclei, prominent nucleoli and scanty to moderate cytoplasm displaying some vacuoles. Scattered tumor giant cells are also seen. Chronic inflammatory cell were infiltrated at some places.

IMPRESSION:
Cytomorphology picture suggestive of High Grade Malignant Neoplasm.(Secondary deposit)



DISCUSSION:
Silvestri G A, Littenberg ,B and Colice G.L et at studied 3,089 imaging scans. They obtained in the study patients after a clinical evaluation. The mean NPV (Negative predictive value) of the clinical evaluation for CT of the brain, abdomen, and radionuclide bone scan is 95, 94, and 89%, respectively. When an expanded clinical evaluation was performed, the NPV was even higher. The NPV was influenced by the prevalence of metastases.

Most of the lung cancer produces a clinical signs and symptoms like pain, tenderness, swelling and most of the time presented as mass elsewhere in an extra thoracic region.

Group of surgeon's examined huge number of cases metastasis to the abdominal cavity and produces various clinical effects including "Acute Abdomen" where hollow viscous was perforated. Robert A. Garwood, M.D., Mark D. Sawyer, M.D., E.J. Ledesma, found out, a case of small bowel perforations are caused most often by adenocarcinoma; however, squamous cell and large cell carcinoma metastases are more likely to result in perforation.

Another study Berger A, Cellier C, Daniel C and his associated found out in 1 patient, the primary tumor was diagnosed after small bowel metastasis resection. Clinical symptoms at presentation were acute peritonitis in 2 patients, progressive digestive obstruction in 3, and gastrointestinal bleeding.

They concluded that Small bowel metastases were located in the jejunum in 2 patients, in the ileum in 3.

Histological features of the metastases were identical to the primary tumor: squamous cell carcinoma (n=3), undifferentiated large cell carcinoma (n=2), adenosquamous carcinoma (n=1), and adenocarcinoma (n=1).

Barta, J.A,Charles A, and Wisnivesky P,Jenumerated that in Asia, Japan has high incidence and mortality rates from lung cancer, comparable to those of the US and Europe . Men have had a higher incidence of lung cancer than women since the 1970s and continue to comprise the majority of new lung cancer cases in Japan today, largely due to gender differences in smoking prevalence.

Singh N, Aggarwal AN, Gupta D, Behera D and Jindal SKet al in one study in northern India. They noted that squamous cell lung cancer was the most common histology overall and among smokers.

Sharma PK and Bansal Ret al found out the relation of cigarette smoking has a reported prevalence ranging from 28 to 57% among men, bidi smoking (hand-rolled tobacco) is the most commonly used (92%) tobacco product used in rural India associated with increased incidence of lung cancer.

CONCLUSION:

The descriptive history, clinical finding, blood biochemistry, radiology, CT scan and cytological picture were conclusive enough to declare for secondary deposit. Further the radiological evaluation done as per protocol that could be considered as metastatic malignancy seeded to bone and soft tissue.

He was advised to FNAC of the bony lytic lesion (near vertebra) Core needle biopsy (for soft tissue), Bone marrow aspiration and biopsy. As the clinical condition was not favorable, he was only with I.V line and blood transfusion. Till then we wait for evaluation and clinical progress.

Most of the clinical situations the metastatic sites and survival in metastatic lung cancer is counteract by sex of the individual, histological subtype of the tumor, and age at diagnosis.

It is commonly said that liver and bone metastases are some indicators poor survival and response to treatment, where the outcome is very unsatisfactory.

REFERENCES

1. Silvestri G A, Littenberg ,B and Colice G.L, "The clinical evaluation for detecting metastatic lung cancer. A meta-Analysis. American Journal of Respiratory and Critical Care Medicine". Volume 152, Issue 1.
2. Robert A. Garwood, M.D., Mark D. Sawyer, M.D., E.J. Ledesma, "A case and review of bowel perforation secondary to metastatic lung cancer".Am Surg . 2005 Feb; 71(2):110-6.
3. Berger, A.,Cellier, C., Daniel, C. Small bowel metastases from primary carcinoma of the lung: clinical findings and outcome. Am J Gastroenterol 1999; 94: 1884–7.
4. Barta, J.A,Charles A, and Wisnivesky P,J, "Global Epidemiology of Lung Cancer".Ann Glob Health. 2019; 85(1): 8.
5. Singh N, Aggarwal AN, Gupta D, Behera D and Jindal SK. Unchanging clinico-epidemiological profile of lung cancer in North India over three decades. Cancer Epidemiology. 2010; 34(1): 101–104.
6. Sharma PK and Bansal R. Profile of lung cancer in predominantly Bidi smoking rural population of northern Himachal Pradesh. Indian J Chest Dis Allied Sci. 2013; 55(2): 75–78.