Case Report

Unusual metastasis in a case of Carcinoma Lung

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Abstract:

Metastasis from carcinoma lung occurs commonly to the brain, bone, adrenal glands, opposite lung, liver, pericardium, and kidneys. Adenocarcinoma of the lung metastasing to small bowel presenting as intussuception has been reported in literature. We here report the case of an elderly male who presented to us with a cavitating lung mass and colonic metastasis which turned out to be a very rare case of squamous cell carcinoma lung metastasing to the large bowel presenting as ileocaecal mass and intestinal obstruction.

Key words: Squamous cell carcinoma, Bowel metastasis

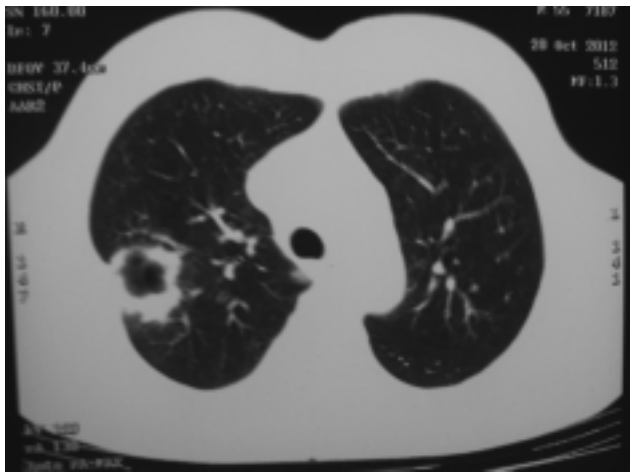
Case report

A Fifty five year old male smoker presented to us with fever and cough of one month duration. He gave history of loss of appetite and loss of weight of about five kilograms during this period. He did not have chest pain, expectoration or haemoptysis. There was no history of any major co-morbidities nor did he give any history suggestive of chronic obstructive pulmonary disease despite being a heavy smoker with smoking score of 1200. General examination revealed clubbing and pallor. There was no lymphadenopathy.Respiratory system examination showed tracheal deviation to right and a cavernous bronchial breath sounds in the infraclavicular and axillary area on the right side. Hence a provisional diagnosis of right upper lobe fibrocavitory disease was made and he was investigated for ruling out active tuberculosis.

His investigations were as follows; Hb: 8gm%, TC-12500 DC N34 L 66 ESR -55 mm/1st hr, RBS-125mg%, Sputum AFB X 2 samples -negative. His Chest X-ray PA view revealed a well defined cavity with irregular thick wall involving predominantly the right upper zone extending to the mid zone fig (1). His sputum cytology was negative and sputum culture and sensitivity revealed normal flora. Mantoux

Chest X-ray PA view Fig (1)

reaction was 15 mm. A CT-Chest taken showed thick walled cavity in the right upper lobe posterior segment and the radiologist gave the possibility of an infectious cause in the form of cavitating pneumonia, possibly tuberculosis as there was no evidence of any luminal mass, mediastinal nodes or bony lesions to suggest a malignancy fig (2)



CT chest showing peripheral cavity Fig (2)

Hence he was started on empirical CAT-I anti tuberculous chemotherapy(ATT) and was advised strict follow up to ensure clearance of the radiological lesion as he was smear negative and the possibility of a cavitating malignancy could not be fully ruled out at this point of time. A repeat chest X-ray at 3 months of CAT-I showed some clearance of the upper zone shadow fig (3). After

Fig (3) Chest X-ray PA after 3 months of CAT-I

about a month later patient developed severe abdominal pain and vomiting. He did not have any hepatic derangement following ATT intake. Hence a surgery consultation was sought to rule out alternate cause for his gastrointestinal problem. On evaluation he had features of sub acute intestinal obstruction and an erect abdomen AP view showed multiple air fluid levels and distended bowel loops and a clinical impression of ileocaecal mass possibly tuberculous aetiology with intestinal obstruction was made, Fig (4).

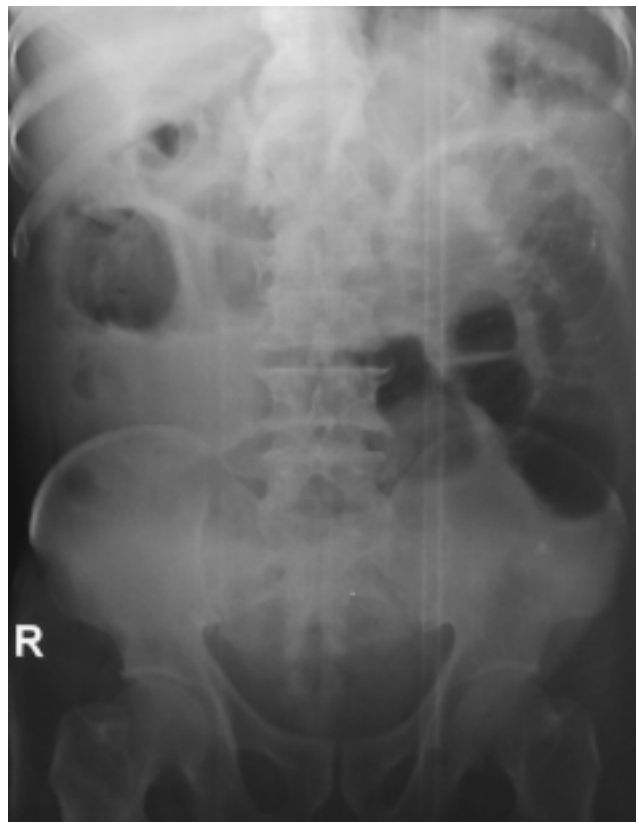


Fig (4) Digital X-ray abdomen AP erect view

An ultrasound abdomen confirmed mass in the right iliac fossa and it also revealed evidence of intestinal obstruction. The patient was immediately subjected to a laparotomy and the mass was resected along with distal ileum and right hemicolectomy was performed followed by end to end anastomosis. The post operative period was uneventful and he was restarted on ATT on the third post operative day. However there was a turn of events when the histopathology report of the resected specimen came as poorly differentiated squamous cell carcinoma which can only be a possibility from a metastasis from a primary elsewhere. This warranted a fibreoptic bronchoscopy and

there was evidence of a predominantly extra luminal compression of the right upper lobe apical segment with intra luminal extension. The biopsy and imprint smear report came as squamous cell carcinoma. A repeat Chest X-ray PA view at 5 months showed evidence of increasing opacity which earlier showed partial resolution which was the reason for the mistaken impression of response to empirical ATT. Finally this case turned out to be one of the most unusual presentation of a primary bronchogenic carcinoma presenting as a cavitating peripheral lung mass leading to intestinal metastasis and ileocaecal mass formation with intestinal obstruction. This was an eye opener to us and prompted us to pursue fibreoptic bronchoscopy in smear negative cases of peripheral cavitating lung lesions without adequate response to antibiotics.

Discussion

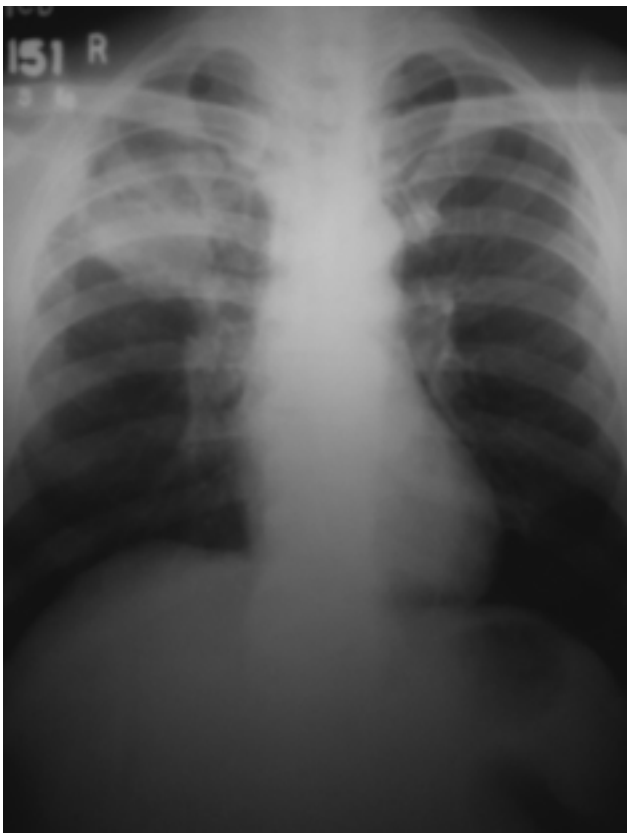


Fig (6) Repeat Chest X-ray showing increasing opacity

Primary carcinoma lung metastasing to the bowel, though very rare, has been reported in the literature[1,2,3.]Unusual histology from a resected specimen of bowel should raise this suspicion and alert the treating physician to search for a feasible primary elsewhere.Our case developed intestinal obstruction secondary to a metastatic lesion with a totally incompatible histology for a primary gastrointestinal malignancy which aided in the confirmation of primary malignancy in the lung with consistent histology of squamous cell carcinoma. The malignancies known to cause secondaries in the large bowel are stomach, breast, ovary, cervix, kidney, lung, bladder, prostate, head and neck tumors and melanoma [4,5]. The usual presentation is with multiple metastatic deposits, but can present as solitary lesion also. Clinically they present with symptoms of colonic obstruction, lower gastrointestinal bleed, weight loss, anemia, bowel perforation, or gastrointestinal fistula [6, 7, 8,9,10]. The usual presentation is after the diagnosis of the primary lesion, but can occur synchronously or before the diagnosis of the primary. Richie et al. suggested intra-luminal seedling of the tumor cells from ingestion of expectorated tumor cells from carcinoma lung [11].

Extrinsic tumours may involve small intestine by direct invasion, intra-peritoneal seeding or via the haematogenous route. The tumour emboli usually lodge into the submucosal layer, and their growth typically results in intramural masses with a bulky polypoid extension into the lumen. These polypoid lesions may obstruct the lumen or may ulcerate and present as perforation peritonitis. Sometimes they may ulcerate or erode into a vessel and present as gastrointestinal bleeding.

The lung cancer with intestinal metastasis has been reported to have poor prognosis with mean survival of only 4-8 weeks. The resection of the colonic and lung lesions, in selected patients, is reported to have survival advantage[12].

References

1. Matthew Galsky, Marla Darling, Jonathan Hecht and Ravi Salgia. Small Bowel Obstruction Due to Metastatic Lung Cancer. Journal of Clinical Oncology; January 2000 vol. 18 no. 1, page 227.
2. Meyers MA, McSweeney J. Secondary neoplasm's of the bowel. Diagnostic Radiology. October 1972;105:1-11.
3. Carroll D, Rajesh PB. Colonic metastases from primary squamous cell carcinoma of the lung. Eur J Cardiothorac Surg 2001;19:719-20.
4. N. Rawat, A. Dawson, S. Hodder, J. Woolgar: Oral

Squamous Cell Carcinoma With Ileal Metastases Presenting with massive Lower Gastrointestinal Bleeding. The Internet Journal of Surgery. 2005 Volume 6 Number 2.

5. Smith HJ, Vlasak MG. Metastasis to colon from bronchogenic carcinoma. Gastrointest Radiol 1978; 2:393- 6.
6. Ejeckam GC, Abele R, Thomas J, Heringer R.Abdominal crisis due to metastasizing lung carcinoma to the small bowel. Can J Surg. 1979 Jul;22(4):351-3.
7. Carr CS, Boulos PB. Two cases of solitary metastases from carcinoma of the lung presenting as primary colonic tumours. Br J Surg 1996;83: 647.
8. John A K, Kotru A, Pearson H J. Colonic metastasis from bronchogenic carcinoma presenting as pancolitis. J Postgrad Med 2002;48:199-2000
9. Sakorafas GH, Pavlakis G, Grigoriadis KD. Small bowel perforation secondary to metastatic lung cancer: A case report and review of literature. Mt. Sinai J Med. 2003;70(2):130-2.
10. Hubens G, Van Eerdeweg W, Schoofs E, Fierens H, et al. Massive intestinal haemorrhage due to a solitary jejunal metastasis of a primary bronchogenic tumor. Acta Chir. Belg. 1992;92:87-190.
11. Richie R E, Reynolds V H, Sawyers J L. Tumor metastases to the small bowel from extra - abdominal sites. Southern Medical Journal. 1973;66(12):1383-1387.
12. Karanikas ID, Hartley JE, Walton AP, McDonald AW, Lee PWR, Duthie GS, et al. Non-primary malignancies of the colon and rectum. Br J Surg 1997;84:32.