



A RARE CASE OF PERICARDIAL CARCINOMATOSIS - ARISING FROM CARCINOMA OF STOMACH

General Surgery

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KEYWORDS

INTRODUCTION

Pericardial carcinomatosis arising from CA stomach is a rare entity. A search of MEDLINE database revealed only 16 cases in literature between 1982 – 2005. Here we discuss a case with cardiac tamponade as carcinoma stomach.

CASE REPORT

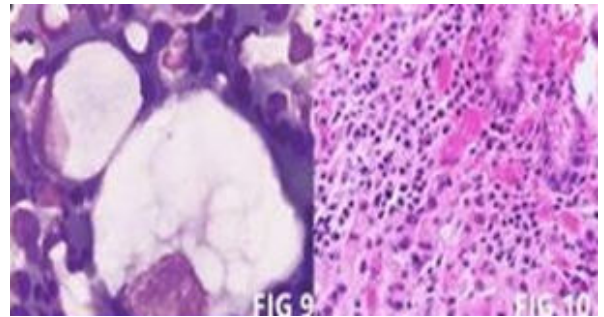
A 46year Old male came to the E.R with complaints of breathlessness without exertion. Fatigue and mild abdomen distension and swelling in B/L lower limbs. Cardiology opinion was obtained. On initial assessment ECG showed low voltage QRS complexes and Ventricular electrical alternans (Fig1). 2D ECHO was done which showed massive pericardial effusion (tamponade) present uniformly with RA collapse and patient was taken for emergency pericardiocentesis 700ml of haemorrhagic fluid was drained and sent for analysis, which later came positive for malignant cells (Fig 2,3,9).

On further evaluation CXR showed increased Cardiothoracic ratio and right pleural effusion and canon ball metastasis (Fig 4).CECT abdomen with thorax was suggestive of circumferential.Wall thickening of stomach(distal body and pylorus).mild ascites, Pericardial effusion with moderate right pleural effusion and mild left pleural effusion along with nodular lung opacities suggestive of secondaries in the lungs (Fig 5,6,7).



Both CEA and CA19-19 were found to be elevated. Upper GI endoscopy was done and revealed ulceroproliferative growth in pylorus (Fig 8). Biopsy reports were suggestive of signet ring cell carcinoma (Fig 10).

CA stomach was confirmed to be the primary tumor on FDG-PET CT – Scan Patient was then referred to department of oncology for palliative chemotherapy.



DISCUSSION

Presenting symptoms of gastric cancer, patients may first complain of upper – abdominal pain. Anorexia. Or other GI symptoms such as nausea, vomiting, bleeding, or melena Fever, bone pain, or skin signs may also be present in the early symptom of gastric cancer.

In the oncological patient, pericardial effusion may develop via several different mechanisms. Namely by direct or metastatic spread of the primary process or as a complication of antineoplastic therapies.

The most commonly reported causes of these include bronchial carcinoma, breast cancer, leukaemia, Hodgkin's disease, Non – Hodgkin's lymphoma, melanoma, and sarcomas. Primary Gastric Carcinoma rarely metastasises to the heart, with 4.3. 7.7% reported from autopsy investigations.

Kobayashi M.et al. reviewed cases reported in the literature and analysed their clinico – pathological features. The study suggested that almost all 17 patients were western and the mean age of the cases was 54 Years (range: 33-69 years). Female patients were younger (mean ; 46.3, range 33 – 65 years).

Our patient, in contrast, was a Indian. Nevertheless, his age at disease onset and the clinical features did not deviate significantly from those of Western patients reported previously, Recently, several cases from Japan were reported which also did not show significant differences in age of onset and clinical features. All these may indicate that the invasion modality of gastric cancers is not racially diverse.

The study also found that 14 of 17 patients died within 6 months of diagnosis of gastric cancer and mean survival was 4.5 months after the diagnosis of pericarditis carcinomatosa. Combination chemotherapy is generally considered after patients died within 6 months of diagnosis of gastric cancer and mean survival was 45 months after the diagnosis of pericarditis carcinomatosa. Combination chemotherapy is generally considered after patients with unresectable or metastatic disease. However, various medical centres could choose different regimens of

combination chemotherapy, especially in light of different regional backgrounds and treatments for gastric cancer.

Our patient was treated with combined cisplatin, 5 fluorouracil and docetaxel and it appeared to be useful. The Patient survived for approximately 6 months, and there was no cardiac tamponade occurrence after the onset of systemic chemotherapy during this time.

CONCLUSION

Cardiac tamponade may be the first clinical sign of primary gastric carcinoma. This is a rare condition and difficult to diagnosis early. Thus, the treating physicians should be aware of malignancy of the stomach in patients with unexplained cardiac manifestations .

REFERENCES

1. Appelqvist P, Maamies T, Gröhn P. Emergency pericardiectomy as primary diagnostic and therapeutic procedure in malignant pericardial tamponade: report of three cases and review of the literature. *J Surg Oncol.* 1982;21:18–22. [PubMed][Google Scholar]
2. Thurber DL, Edwards JE, Achor RW. Secondary malignant tumors of the pericardium. *Circulation.* 1962;26:228–241. [PubMed][Google Scholar]
3. Kusnoor VS, D'Souza RS, Bhandarkar SD, Golwala AF. Malignant pericardial effusion. Report of 2 cases. *J Assoc Physicians India.* 1973;21:101–104. [PubMed][Google Scholar]
4. Theologides A. Neoplastic cardiac tamponade. *Semin Oncol.* 1978;5:181–192. [PubMed][Google Scholar]
5. Ohtomo T, Sakanaka M, Urano S, Shimizu I, Kitamura H, Kunishige H, Andachi H. Superficial spreading carcinoma of the stomach presenting as neoplastic cardiac tamponade: report of a case with autopsy findings. *Matsushita Med J.* 1982;20:28–35. [Google Scholar]
6. Koide S, Kawada S, Inoue H, Ogawa J, Fukuda T, Inamura S, Shohtsu A, Hoshiai M. Cardiac tamponade – especially with subxiphoid pericardial window. *Heart.* 1984;16:504–511. [Google Scholar]
7. Usami I, Kato M, Hayashi Y, Kuroki H, Hanaki H, Furutani M, Yamada Y, Takeuchi T. Local treatment of cancerous pericarditis by cisplatin. *Jpn J Lung Cancer.* 1989;29:127–131. [Google Scholar]
8. Moriyama A, Murata I, Kuroda T, Yoshikawa I, Tabaru A, Ogami Y, Otsuki M. Pericardiac metastasis from advanced gastric cancer. *J Gastroenterol.* 1995;30:512–516. [PubMed][Google Scholar]
9. Orihata M, Hata M, Hase Y, Nakagawa H, Kidokoro T, Yamanaka O, Sagawa F. A case of cardiac tamponade induced by cardiac metastasis of a gastric cancer two years after a surgical treatment. *J Jpn Surg Assoc.* 1996;57:862–866. [Google Scholar]