INTRODUCTION
Cancer antigen 125 (CA 125) is a mucin-like glycoprotein expressed in normal tissue originally derived from coelomic epithelium such as peritoneum, pleura, pericardium, fallopian tubes and endometrium. Serum CA 125 is widely used as a tumor marker in the monitoring of epithelial ovarian cancer. Increased serum levels of CA 125 have also been found in non-gynecological tumors and non malignant disease involving peritoneum. A few recent studies and sporadic case reports have reported a rise in S.CA 125 level in patients with non-Hodgkin’s lymphoma.

In NHL, increase levels of S. CA 125 is associated with advanced disease stage, pleural and peritoneal effusions, high LDH levels, poor performance status, mediastinal and/or abdominal involvement, elevated International Prognostic Score, partial or no response to treatment. We report a case of non-Hodgkin’s lymphoma who presented with peritoneal and pleural effusions with a very high level of serum CA 125.

CASE REPORT
A 54 years female presented with a 2 weeks history of rapid distension of abdomen and swelling of legs. On examination she had a poor performance status (PS 3, according to ECOG), mild pallor, gross pitting oedema of legs, gross ascites, palpable left supraclavicular node and small bilateral axillary nodes and bilateral pleural effusions of moderate quantity.

In view of gross ascites and bilateral pleural effusion, in a middle aged lady, she was initially evaluated for ovarian malignancy. Serum CA 125 was found to be very high 4462.60 u/ml but ascitic fluid cytology and FNAC from supraclavicular node were inconclusive. The ascitic fluid was chylous and serum LDH was also high 1330 (upper normal limit – 450 U/L). CT scan abdomen had shown a retroperitoneal mass and a trucut biopsy from which was suggestive of diffuse large B cell lymphoma, (CD20+ve). Bone marrow biopsy revealed uninvolved marrow.

She was started on CHOP combination chemotherapy and the disease showed no response to first 2 cycles. Then she was started on second line chemotherapy with Paclitaxel and Gemcitabine and is still undergoing treatment. After one cycle of Paclitaxel and Gemcitabine her S.CA 125 level was found to be regressed to 1243.06 u/ml.

DISCUSSION
The peritoneal mesothelial cells stimulated by the lymphokines produced by lymphoma cells have been found to be responsible for the high serum level of CA 125. Serum CA 125 levels appear to reflect the patients response to the invasive potential of the tumor giving...
a measurement of its infiltrative activity. Higher level of Serum CA 125 has been reported in both low grade and aggressive lymphoma. In most of the studies the maximum level of serum CA 125 ranged from 1070 to 1400 u/ml specially in patients with effusion, whereas in our case it was quite high (> 4000 u/ml) resulting in diagnostic dilemma.

There is a definite correlation between the higher serum CA125 level and advanced disease and the site of involvement. Serum CA125 is not only a reliable marker for staging and assessing tumor activity in NHL, but also of survival, higher levels are predictive of decreased survival.

Higher serum CA125 level along with high LDH level has been reported to be an important prognostic factor in NHL. Higher serum CA 125 level is found to be a poor prognostic factor independent of advanced stage or high LDH level in NHL.

Serum CA 125 has been found to be an useful indicator of abdominal involvement in lymphoma. Moreover its measurement may be of value in monitoring response to chemotherapy in these patients. Additionally its measurement may contribute to early detection of mediastinal or abdominal recurrence. Thus constituting an additional index for monitoring of patients after completion of chemotherapy.

To conclude, in a female patient with ascites or pleural effusion with high serum CA 125 level, a differential diagnosis of lymphoma should not be overlooked, specially if ascitic or pleural fluid cytology fail to show epithelial carcinoma cells.

REFERENCES

9. Tanja Fehm, Eberhard Beck. CA 125 Elevations in patients with

Announcement

Contact: Dr. SM Alam   Email: drsmalam@rediffmail.com

Announcement

6th Congress of the Asian Pacific Society of Atherosclerosis and Vascular Disease, Hong Kong, Oct 1-5, 2008, Contact: Dr. B Tomlinson   Email: btomlinson@cuhk.edu.hk

Announcement

14th World Congress on Clinical Nutrition, (Nutri-Heart), Kosice, Slovakia, June 2009.
Contact: Dr. Daniel Pella, Executive Director, ICC, Faculty of Medicine, P J Safaric University, Kosice, Slovakia   Email: pellad@hotmail.com