

Case Report

Unusual Presentation of Pure Ovarian Choriocarcinoma-A Case Report

Haritha Sagili^{1*}, Papa Dasari¹ and Bhawana Bhade²¹Department of Obstetrics and Gynecology, Jawaharlal Institute of Postgraduate Medical Education and Research, India²Department of Pathology, Jawaharlal Institute of Postgraduate Medical Education and Research, India

CASE REPORT

A 30 year old G5P2L2A2 presented with 2 months amenorrhoea and spotting per vaginum for 2 days. Urine test for hCG was positive and ultrasound revealed a normal uterus and a left complex adnexal mass measuring 8×6 cms. A provisional diagnosis of ectopic pregnancy or hormone secreting ovarian tumour was made. On laparotomy, the left ovary was replaced by a solid vascular mass densely adherent to the sigmoid colon. (Figure1) Left salpingoovariotomy was carried out with difficulty after releasing the adhesions. On the second postoperative day, she developed headache and vomiting. Fundus examination showed papilloedema and CT scan revealed 2 metastatic deposits in the parietal and temporal lobes (Figure 2). Choriocarcinoma was suspected, serum β hCG was 72,000 IU/ml, CXR showed a 2cm lesion in the right lower lobe (Figure 3) and histopathology revealed ovarian choriocarcinoma (Figure 4). She was being managed with anticerebral oedema measures and chemoradiation but her condition deteriorated and she was taken home against medical advice.

DISCUSSION

Choriocarcinoma of the ovary, either gestational or non gestational in origin is a rare entity. The gestational type which is more common can arise from a primary ovarian pregnancy or a metastasis from uterine or tubal choriocarcinoma. The

*Corresponding authors

Haritha Sagili, Department of Obstetrics and Gynaecology, Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry-605005, India, Tel: 0091-9489390630; Fax: 0091-413-2272735; Email: harithasagili@gmail.com

Submitted: 08 May 2014

Accepted: 27 May 2014

Published: 29 May 2014

ISSN: 2333-6439

Copyright

© 2014 Sagili et al.

OPEN ACCESS



Figure 2 2 metastatic deposits in the parietal and temporal lobes.

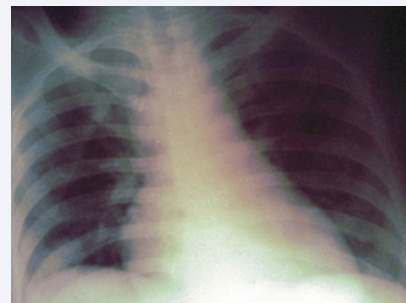


Figure 3 2cm lesion in the right lower lobe suggestive of metastasis.



Figure 1 Solid vascular mass adherent to sigmoid colon.

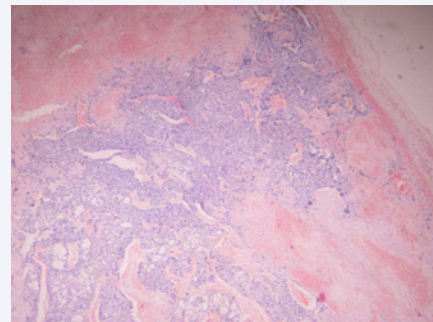


Figure 4 Ovary with capsule showing nests of bizarre cells with large areas of haemorrhage (100X).

nongestational type is a type of germ cell tumor and may occur in a pure form or associated with other germ cell lines and accounts for 0.6% of all neoplasms [1]. Pure ovarian choriocarcinoma pose diagnostic and therapeutic challenges.

This patient was mistaken to have a chronic ectopic pregnancy based on ultrasound appearance and was taken up for laparotomy. Few other cases of ovarian choriocarcinoma misdiagnosed as ectopic pregnancy preoperatively have been reported in literature [2,3]. Although preoperative diagnosis of ovarian choriocarcinoma by FNAC [4] and ultrasound [5] has also been described in one case each, the final confirmation of diagnosis is based on histopathology. For more accurate preoperative diagnosis, investigations such as MRI or CT scan and CXR should be considered.

It is difficult to distinguish nongestational from gestational choriocarcinoma on histopathology unless other germ cell tumor coexists or pregnancy is demonstrated. Molecular genetic analysis including DNA polymorphism studies [6] is reliable in distinguishing gestational from non gestational ovarian choriocarcinoma but is not widely available and expensive.

Nongestational choriocarcinoma are more aggressive with worse prognosis when compared to ovarian choriocarcinoma. The chemotherapy drugs for treating appears to be different hence it is important to distinguish the two. Because NGCO is considered as a germ cell tumor, BEP is the recommended regime when compared to GCO which responds well to methotrexate based treatment [7].

There is no recommended method of surgery and out of the cases reported so far half had TAH+BSO and in the remaining cases salpingoovariotomy was carried out. Postoperative chemotherapy regimens included methotrexate in seven women and 2 patients received BEP.

Central nervous system (CNS) involvement in choriocarcinoma suggests widespread disease and usually present with concurrent pulmonary metastases. Although clinically apparent in only 7%-28% of patients with choriocarcinoma, CNS involvement is found in as many as 40% of patients on post-mortem examination and pose a significant threat to patients. There is no consensus on

the type of surgery and chemotherapy. Cerebral metastases in choriocarcinoma are considered an oncologic emergency and they tend to respond favourably to radiotherapy and chemotherapy. Need for primary treatment of the brain with whole brain irradiation is related to high chance of tumor haemorrhage and should be considered on urgent basis to improve long term outcome. Patient should be advocated aggressive combined chemotherapy after stabilizing brain metastases with whole brain radiotherapy and concurrent chemotherapy.

CONCLUSION

A high index of suspicion for choriocarcinoma is necessary in a young patient with amenorrhoea and a complex adnexal mass. Estimation of serum β hCG plays a key role in the management. In a patient of choriocarcinoma with cerebral involvement, multidisciplinary team of surgical, medical and radiation oncologist along with gynaecologist is needed to provide optimal care.

REFERENCES

1. Vance RP, Geisinger KR. Pure nongestational choriocarcinoma of the ovary. Report of a case. *Cancer*. 1985; 56: 2321-2325.
2. Balat O, Kutlar I, Ozkur A, Bakir K, Aksoy F, Ugur MG. Primary pure ovarian choriocarcinoma mimicking ectopic pregnancy: a report of fulminant progression. *Tumori*. 2004; 90: 136-138.
3. Chen YX, Xu J, Lv WG, Xie X. Primary ovarian choriocarcinoma mimicking ectopic pregnancy managed with laparoscopy -- case report. *Eur J Gynaecol Oncol*. 2008; 29: 174-176.
4. Naniwadekar MR, Desai SR, Kshirsagar NS, Angarkar NN, Dombale VD, Jagtap SV. Pure choriocarcinoma of ovary diagnosed by fine needle aspiration cytology. *Indian J Pathol Microbiol*. 2009; 52: 417-420.
5. Bazot M, Cortez A, Sananes S, Buy JN. Imaging of pure primary ovarian choriocarcinoma. *AJR Am J Roentgenol*. 2004; 182: 1603-1604.
6. Yamamoto E, Ino K, Yamamoto T, Sumigama S, Nawa A, Nomura S, et al. A pure nongestational choriocarcinoma of the ovary diagnosed with short tandem repeat analysis: case report and review of the literature. *Int J Gynecol Cancer*. 2007; 17: 254-258.
7. Park SH, Park A, Kim JY, Kwon JH, Koh SB. A case of non-gestational choriocarcinoma arising in the ovary of a postmenopausal woman. *J Gynecol Oncol*. 2009; 20: 192-194.

Cite this article

Sagili H, Dasari P, Bhade B (2014) Unusual Presentation of Pure Ovarian Choriocarcinoma-A Case Report. *Med J Obstet Gynecol* 2(1): 1022.