Reviewer's report

Title: Primary small adenocarcinoma in adenomyosis with nodal metastases: a case report

Version: Date: 15 January 2007

Reviewer: Giovanna giordano

Reviewer's report:

General
The Authors describe a case of endometrial carcinoma in adenomyosis with nodal metastases. This is an interesting and informative study but the write-up needs extensive work. There are critical points that require both major and minor revisions before considering for publication.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

In Background, in references and discussion

The authors should be considered other cases of endometrial carcinoma arising in adenomyosis i.e.:


Mittal KR, Barwick KW Endometrial adenocarcinoma involving adenomyosis without true myometrial invasion is characterized by frequent preceding estrogen therapy, low histologic grades, and excellent prognosis. Gynecol Oncol. 1993 May;49(2):197-201.


The sentence: “only about 30 cases of adenocarcinoma arising from adenomyosis have been reported in English literature” is not correct. The above citated papers are not considered by authors.

In Clinical summary

The authors do not report the symptoms of the patient which can motivate the gynaecological examination and ultrasound scan which reveal enlarged uterus.

In result of ultrasound scan a leiomyoma is not reported. Why?

This lesion, instead, is described in pathological findings.

Moreover, in postmenopausal women, because endogenous systemic hyperestrogenism can be related with obesity the authors should state precisely if the patient is obese, in clinical summary.

In the Material and methods, Pathological findings

Although the authors performed C-erb B2 immunostaining, they do not mention the results in pathological findings and discussion.

Fig 1 C is not adequate to demonstrate the metastasis of endometrial carcinoma into a lymph node. More adequate is a photo of histological section showing both neoplasm and lymphonodal tissue, at low magnification.

Ca-125 represents more adequate marker than Cytokeratins AE1/AE3 to identify endometrial metastasis in the lymph node.

In discussion

1) For major clarity, a brief mention about the role of aromates and the 17 ?-hydroxysteroid dehydrogenase should be made, because the endometriosis is considered an estradiol-dependent disorder, a consequence
of aberrant aromates expression and 17\alpha hydroxysteroid dehydrogenase deficiency.

2) Since the authors observe strong expression of ER/PR and weak aromatase expression in the leiomyoma, they suggest that this tissue could represent a hyperestrogenic microenvironment able to promote growth and neoplastic transformation of adenomyotic foci. Since ER represents only a promotor for neoplastic transformation of adenomyotic foci, to clarify the mechanisms of carcinogenesis in adenomyosis, the authors should evaluate the expression of other markers such as cyclooxygenase-2 (COX-2) and P53. I think these markers can have an important role in neoplastic transformation of adenomyotic tissue. In fact, (COX-2) is an enzyme responsible for prostaglandin synthesis, onset and progression of many malignant tumors.


Giordano G et al. Postmenopausal status hypertension and obesity as risk factors for malignant transformation in endometrial polyps Maturitas 2007; 56: 190-197

Moreover, (COX-2) overexpression has been already documented in ovarian cancer concomitant with ovarian endometriosis


The authors should consider overexpression of P53 because this tumor suppressor gene is thought to play an important role in the neoplastic transformation and progression of endometrial adenocarcinoma and in other cases of endometrial carcinoma arising from adenomyosis.


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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
The article should be revised for many typographic errors ie:
In clinical Summary at the age of 33 (years)
Progeston corrected with progesterone
Metastases should be metastasis.
In references delete [] (reference 11)
In Reference 2 3rd author is de Oliveira C.
Journal of reference 12 is Arch Surg 1925; 10:172
The title of paper should be modified as: Small primary adenocarcinoma in adenomyosis with nodal metastasis……
English language should be revised in clarity particularly in discussion, where the last sentences are long

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Discretionary Revisions (which the author can choose to ignore)
Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions.

Level of interest: An article whose findings are important to those with closely related research interests.

Quality of written English: Not suitable for publication unless extensively edited.

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I have no competing interest.