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RESEARCH ARTICLE

ENDOMETRIAL CARCINOMA IN A 24-YEAR-OLD: A CASE REPORT AND SYSTEMATIC REVIEW

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Abstract

The incidence of endometrial cancer has been increasing during 1999–2010 with an annual percent changes of 6.9%, and shows a distinctly increasing pattern in younger and older females (annual percent changes in females <30 and >80 years old were 11.2% and 9.5%, respectively). We present a case of 24 years old women with endometrioid cancer and treated successfully by Wertheim. Because the patient refused medical treatment Despite the fact that the majority of occurrences of EC happen after menopause, it has been documented in women of reproductive age, with 4% of cases happening in those who are 40 years or younger (1). Here, we provide a remarkably uncommon instance of an EC-positive young woman who lacked any risk indicators, such as obesity or a family history. However, despite the lack of a favorable family history, hereditary variables must be taken into account when EC develops in a young lady of this type ED it should be considered among juveniles with sustained abnormal uterine bleeding, even if they have no risk factors.

Introduction:-

The incidence of endometrial cancer has been increasing during 1999–2010 with an annual percent changes of 6.9%, and shows a distinctly increasing pattern in younger and older females (annual percent changes in females <30 and >80 years old were 11.2% and 9.5%, respectively) (1). Endometrial cancer occurs mainly in menopausal women, but it can develop in younger women as well, 2% to 14% of cases occur in women with 40 years old or younger (2,3)Endometrial cancer occurred in young patients is extremely rare, (4,5)

Case Presentation

We report a case of 24 years old married womangravida 2 parity 2 without any medical history who presented to gynecology exam for menorrhagia evolving since 9months without hemodynamic repercussions, general examination finds stable patient in good general condition; gynecological exam was without any abnormalities.

Pelvic endovaginal ultrasound was performed showing endometrial thickening of 10mm, the exam was completed by hysterosonography showing an intracavitary endometrial polyp of 28mm

The decision was to proceed by hysteroscopy for polyp resection and endometrial biopsy, that the result showed endometrial adenocarcinoma of papillary type infiltrating the myometrium on adenomyotic uterus,

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So since clinical examination was normal, we performed a pelvic MRI showing myometrium invasion under 50%, a full body CT scan did notshow any secondary localization.

We therefore performed immunohistochemical analysis of mismatch repair protein, this being the optimal means of screening for Lynch syndrome, the false negative rate being 5%–10% in individuals with colorectal carcinoma (2) Normal staining of mismatch repair protein was found in our patients.

The standard treatment for early-stage EC is total hysterectomy and bilateral salpingo-oophorectomy with pelvic lymph node evaluation. However, for young women who desire fertility preservation, progestin therapy is an acceptable treatment option. The patient didn't accept progstative treatment.

The decision made in multidisciplinary consultation meeting was to proceed by aWertheim procedure with lymph node curing which anatomopathologist results showed a T3N0Mx tumor with immunohistochemy test similar to the one made on the biopsy **figure 1**

Discussion:-

Despite the fact that the majority of occurrences of EC happen after menopause, it has been documented in women of reproductive age, with 4% of cases happening in those who are 40 years or younger (1). Here, we provide a remarkably uncommon instance of an EC-positive young woman who lacked any risk indicators, such as obesity or a family history. However, despite the lack of a favorable family history, hereditary variables must be taken into account when EC develops in a young lady of this type. Therefore, in order to test for Lynch syndrome, we used immunohistochemistry investigation of mismatch repair protein, the false negative rate in people with colorectal cancer being 5%–10% (2) The mismatch repair protein was stained normally in our patients, although this does not completely rule out Lynch syndrome. We did not carry out germline testing on the patient because she and her family decided against further investigation of germline mutations linked to Lynch syndrome.

In our opinion, the discovery of heavy, thickened endometrium on abdominal ultrasound and magnetic resonance imaging (MRI) in young teenagers exhibiting these symptoms warrants further research into the likelihood of malignancy by performing endometrial curettage under anesthesia.

Total hysterectomy, bilateral salpingo-oophorectomy, and pelvic lymph node assessment are the usual treatments for early-stage EC. However, progestin medication is a viable treatment choice for young women who want to preserve their fertility. According to a meta-analysis, 82.4% of patients who receive progestin medication achieve remission (4). The only oral progestin available in Japan is MPA. It has undetectable negative effects, including thrombus development, dysthymia, headaches, weight gain, chest pain, and others. Another alternative for progestin therapy is a progestin-releasing IUD, which, coupled with oral progestin medications, has a global complete remission (CR) rate of 87.5%. (5). Combining progestin-releasing IUDs with oral progestin is anticipated to increase the CR rate while also offering patients who do not want to become pregnant right away a potent treatment option. Progestin-releasing IUDs are an effective maintenance treatment with a minimal risk of side effects, especially in very young individuals who require long-term treatment to prevent recurrence. In Japan, women who experience dysmenorrhea or hypermenorrhea may benefit from using a progestin-releasing IUD (levonorgestrel IUD).

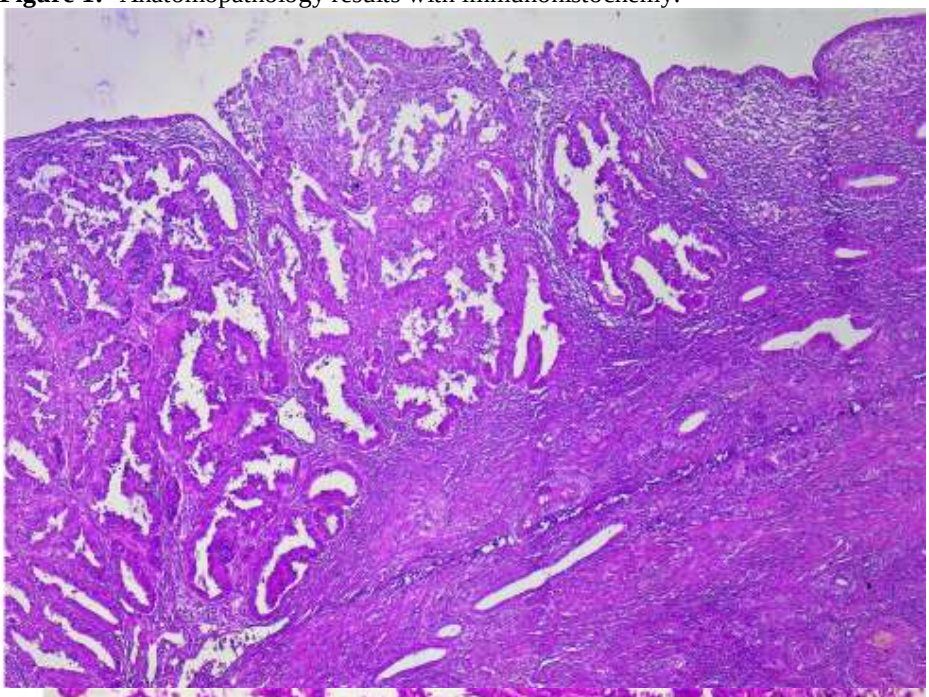
We expect that a progestin-releasing IUD will be swiftly approved in Japan as continuation therapy for young EC patients who receive CR after undergoing fertility-sparing therapy. The KGOG study group found that for patients with stage IA, grade 1 EC, the recurrence incidence is 30.4% after obtaining CR (6). It is advised that women who have achieved CR undergo long-term follow-up endometrial imaging, such as MRI or CT, for endometrial assessment. The patient in this instance declined medical care. In general, the FIGO recommends systematic surgical staging for most patients, consisting of hysterectomy with bilateral adnexal removal and systematic pelvic and para-aortic lymphadenectomy (up to the inferior aspect of the left renal vein). The findings obtained through this basic initial treatment serve as the definitive guide to the potential use of further adjuvant measures, depending on the stage of disease.

Patients with tumor stage IA and grade 1 or 2 are unlikely to have lymph node involvement, and their prognosis is usually very good. Thus, systematic lymphadenectomy is not indicated for such patients, as it offers them no more than a marginal survival advantage.

Conclusion:-

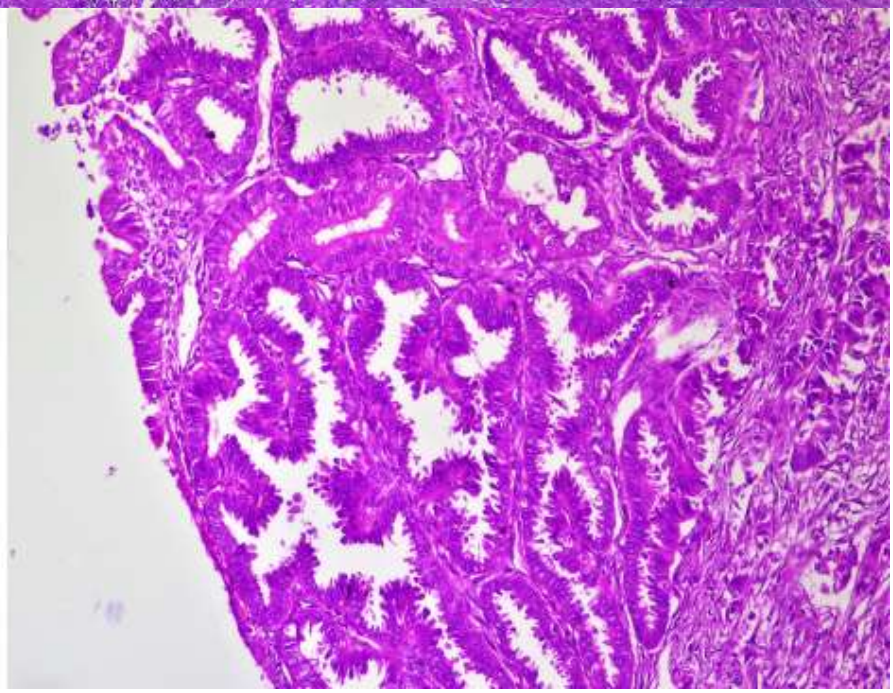
We present a case of juvenile patient with EC who was surgically treated. Although juvenile EC is extremely rare, it should be considered among juveniles with sustained abnormal uterine bleeding, even if they have no risk factors. Furthermore, fertility preservation in juvenile patients (who presumably do not want to become pregnant for many years) requires a longer time frame than for older patients; during this time, maintenance treatments that avoid EC recurrence with low adverse effects are needed after achieving CR of disease.

Figure 1:- Anatomopathology results with immunohistochemy.



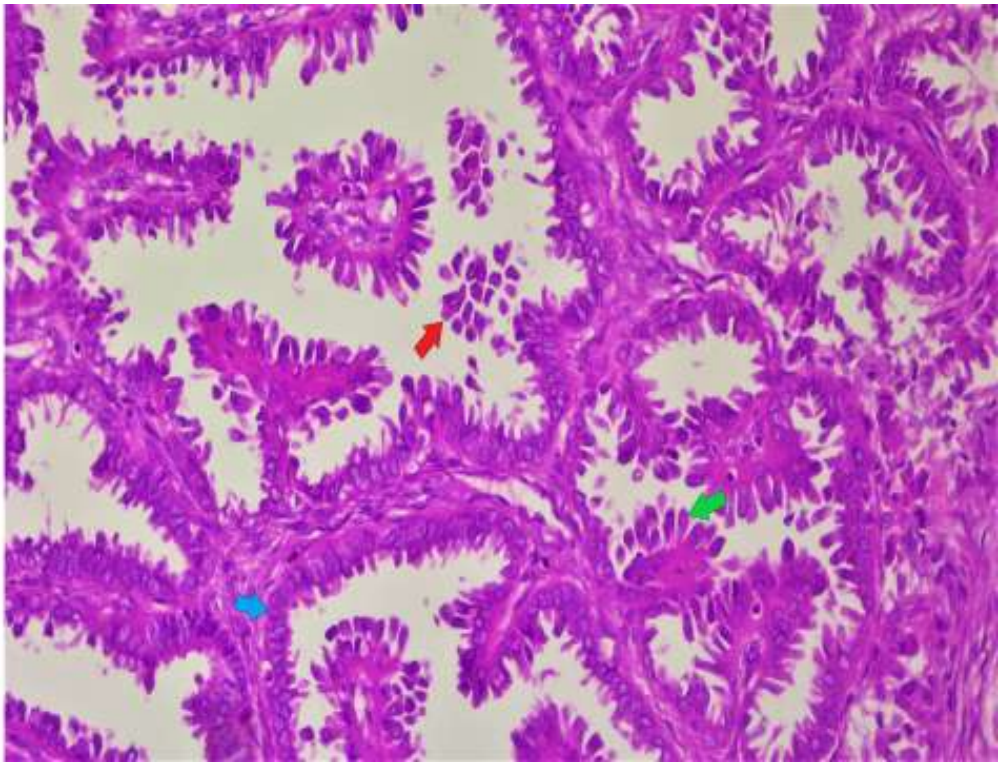
Low power view of the endometrial mucosa invaded by a tumoral proliferation displaying both papillary and glandular architecture. The tumor extends into the myometrium. (Magnification x4).

Vue à faible puissance de la muqueuse endométriale infiltrée par une prolifération tumorale montrant une architecture papillaire et glandulaire. La tumeur s'étend au myomètre. (Grossissement x4).



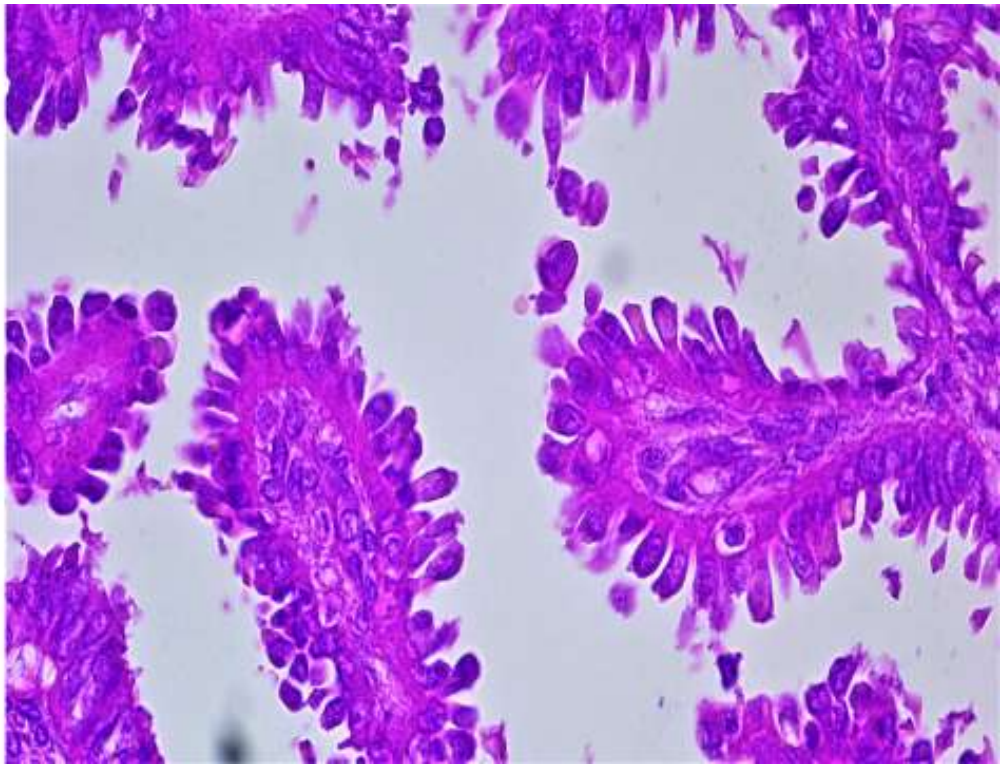
Tumoral proliferation showing a complex papillary architecture. Numerous mitosis can be seen. (Magnification x10)

Prolifération tumorale montrant une architecture papillaire complexe. Plusieurs mitoses sont visibles. (Grossissement x10).



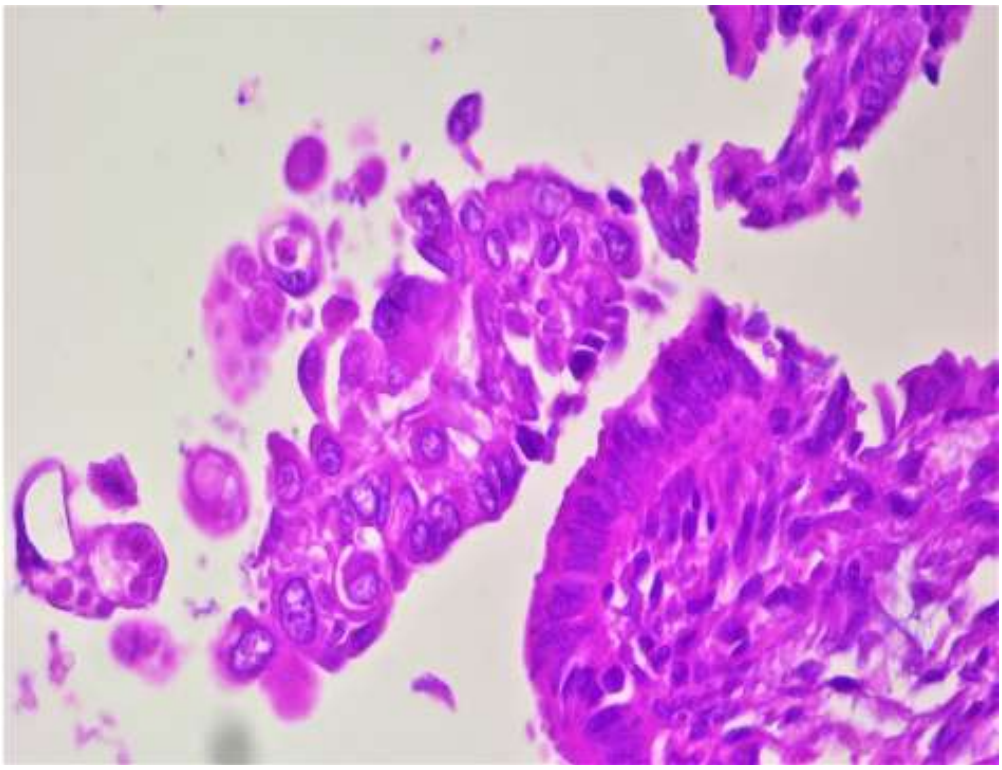
Papillary fronds may be either short and densely fibrotic, or thin and delicate. The cells covering the papillae are mainly hobnail shaped (Green arrow) or cuboidal (Blue arrow), with many of them being detached and float freely in spaces between the papillae and in gland lumens (Red arrow).
(Magnification x20)

Les papilles peuvent être courtes avec un axe fibreux élargi, ou fines et délicates , dotées d'axes fins. Les cellules bordantes sont souvent disposées en "clou de tapissier" (flèche verte) ou cubiques (flèche bleue). Elles se détachent fréquemment et flottent librement dans les espaces entre les papilles et dans les lumières glandulaires (flèche rouge).
(Grossissement x20)



Papillary structures are lined by markedly atypical hobnail-type cells.
(Magnification x40)

Les structures papillaires sont tapissées de cellules de type en clou de tapissier ,nettement atypiques.
(Grossissement x40)



Tumoral cells displaying marked nuclear atypia, enlarged, vesicular nuclei with evident nucleoli, and abundant granular eosinophilic cytoplasm. (Magnification x40)

Les cellules tumorales présentant des atypies nucléaires marquées, des noyaux vésiculaires volumineux avec des nucléoles évidents, et un cytoplasme éosinophile granuleux abondant. (Grossissement x40)

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