Malignant melanoma: a rare case report

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Highlight :

Malignant, melanoma, tumor, genital

Abstract: Malignant melanoma is an aggressive tumor of the skin and mucous membranes that grows on melanocytes. The diagnosis is often unrecognized and is made at a late stage. Its evolution is unfavorable with frequent visceral metastases and a very short survival. A 46 years old patient, consulted for menometrorrhagia evolving for 5 months. The rectal examination revealed an enlarged uterus with the perception of a poorly defined vaginal mass that was difficult to characterize. A suprapubic pelvic ultrasound showed a rounded echogenic image of 13.9/13.6 mm in the vagina. An abdomino-pelvic scan (figure 1) showed 2 pelvic masses: vaginal and uterine, measuring respectively 80×85 mm and 95×140 mm in diameter, associated with heterogeneous locoregional PDAs, the largest measuring 26 mm in minor axis, of secondary appearance. The histological study confirmed the diagnosis. Due to the secondary nature of the disease, the patient was to receive chemotherapy. However, she died before the beginning of the treatments.

Introduction :

Malignant melanoma is an aggressive tumor of the skin and mucous membranes that grows on melanocytes.

It represents 0.03% of all cancers [1].

It occurs in various locations including the oral cavity, anus, conjunctiva and more rarely in the female genital mucosa. This last location represents less than 2% of all melanomas [1].

The diagnosis is often initially unrecognized and is made at a late stage. Its evolution is unfavorable with frequent visceral metastases and a very short survival.

We report a case of primary melanoma of the female genital tract.

Case report :

A 46 years old patient, single, nulligest, having her menarche at the age of 13 with a regular cycle, was refered for menometrorrhagia evolving for 5 months.

Gynecological examination revealed a normal vulva, the speculum was not performed because the patient said she was a virgin. The rectal examination revealed an enlarged uterus with the perception of a poorly defined vaginal mass that was difficult to characterize.

The rest of the somatic examination was unremarkable.

Suprapubic pelvic ultrasound showed a rounded echogenic image of 13.9/13.6 mm in the vagina.

Abdomino-pelvic scan (figure 1) showed 2 pelvic masses: vaginal and uterine, measuring respectively 80×85 mm and 95×140 mm in diameter, associated with heterogeneous locoregional PDAs, the largest measuring 26 mm in minor axis, of secondary appearance.

The decision was to perform a bistournage of the vaginal mass, the exploration by a virgin speculum, noted the presence of a blackish process of about 10 cm of large axis, adhering to the anterior and lateral right vaginal wall at 1.5 cm from the vulvar orifice, the biopsy of the process was performed with obtaining several tissue fragments.

Anatomopathological result was in favor of a malignant tumor proliferation, the tumor cells are arranged in an anarchic way around numerous dilated vessels with the presence of numerous hemorrhagic and necrotic foci. Immunostaining confirmed the diagnosis of vaginal melanoma. (figure 2)

The extension workup included a complete dermatological examination and an ophthalmological examination that came back normal, a CT-PET scan showed locoregional PDAs, with the presence of a highly suspicious spiculated left scissural lung nodule. The diagnosis of a primary metastatic vaginal melanoma was retained.

The decision was to start chemotherapy for a primary metastatic vaginal melanoma, but the patient died 1 month before starting treatment.

Discussion :

The most frequent symptom is the existence of a tumor; some patients have inguinal adenopathies, most of these tumors arise de novo, rarely they develop on a pre-existing nevus [2,3]. Sometimes it is the existence of pruritus or bleeding that leads to the discovery of the lesion [2,3].

50-75% of tumors occur in the labia majora and minora, the clitoris is the second most affected area, followed by the vulvar

fork and the urethral meatus [4].

Three macroscopic forms are described which are all characterized by indolence, friability and easy bleeding on contact.

The vaginal examination must be done in a gentle manner to avoid bleeding; a firm, irregular nodule bleeding on contact can be palpated.

The digital rectal exam gives an idea about the parameters, it can detect infiltration of the rectal or pelvic wall. [5,6]

Examination of all lymph nodes should be systematic and methodical, especially those draining the genital tract.

Careful and methodical examination of all systems should be performed as malignant melanoma can metastasize to the liver, lung, pelvis and brain.

Any lesion suspected of being a melanoma warrants a full-thickness, complete excision to determine the histologic nature of the lesion. [7]

Once the diagnosis of malignant melanoma is made, it remains to prove its primary or secondary nature by a meticulous clinical and paraclinical examination in search of a primary cutaneous, ophthalmologic, ENT and digestive melanoma.

Chest X-ray and abdominal ultrasound: the value of these examinations as reference imaging is debated and may lead to additional invasive exploration [8].

Cerebro-thoraco-abdomino-pelvic computed tomography (CT) seems to be the most suitable examination given the superiority of its diagnostic performance established by several studies. [9]

MRI remains the best examination for the detection of liver, bone and especially brain metastases.

However, it does not offer any advantage for the detection of pulmonary lesions compared to CT.

Node ultrasound with a 7.5 to 10 MHz probe is more sensitive and specific than clinical examination.

Surgical resection, which is increasingly conservative, as radical resections have not been shown to improve survival, for the vulva and vagina reconstructive surgery is possible. [1]

Sentinel Ganglion excision should not be proposed systematically but its use can be proposed in the framework of therapeutic trials or evaluation protocols. [10]

Conventional chemotherapies can be used with poor results especially in melanoma of gynecological origin [11].

Radiation therapy may be used as a palliative measure when lymph node lesions are inaccessible to surgery or if the patient is inoperable [12].

The life expectancy of vaginal Malignant Melanoma at 5 years is 7% in the literature, the average survival is 18 months. [13]

Conclusion :

Primary malignant melanoma of the female genital tract is a rare pathology, the mechanisms of carcinogenesis of this tumor lesion are still poorly understood.

Its symptomatology is not very characteristic, thus leading to a delay in diagnosis.

The anatomopathologist plays a primordial role in the diagnosis, which can however be difficult especially when the morphological aspect is not very evocative, hence the importance of the immunohistochemical study

There is no therapeutic consensus concerning melanomas of the female genital tract, however it is based on the same therapeutic principles as the treatment of cutaneous melanomas for systematic treatment and on the treatments of gynecological cancers for locoregional treatment.

The overall prognosis remains very unfavorable, marked by frequent and early recurrences.

Iconography:

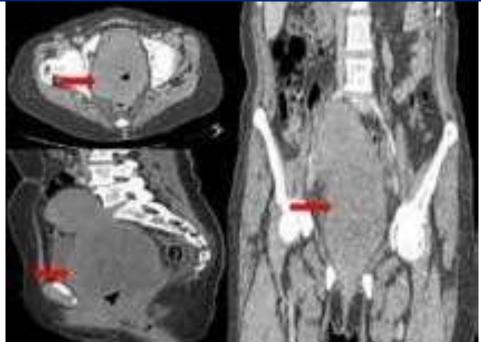


Figure 1: Axial section of a pelvic CT scan with reconstruction in the coronal and sagittal planes showing a bilobed mass centered in the uterus, containing calcifications. The mass is well bounded and displaces the bladder frontally and the sigmoid posteriorly.

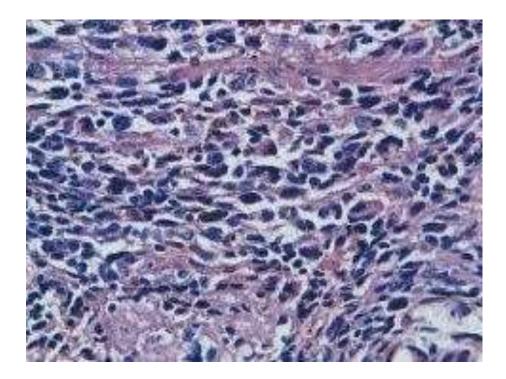


Figure 2: Histological cut showing tumor cells arranged in an anarchic way around numerous dilated vessels

References:

- [1] TroneJC,GuyJB,MeryB,LangrandEscureJ,LahmarR,MoncharmontC,Rivoirard R, Semay T, Chauleur C, Collard O, Vignot S, Magné N. Mélanomes du tractus génitalféminin:étatdeslieux.BullCancer2014;101;102-6.
- [2] Boel K. Ragnarsson Olding., Hemming J., Ringborg U.K., RutqvistLE. Malignant melanoma of the vulva and vagina : trends in incidence, age distribution and long-term survival among 245 consecutive coss in Sweden 1960-1984. Cancer, 1993, 71 (5) : 1893-97
- [3] BreslowA.:Pronosticfactorsinthetreatmentofcutaneouxmelanoma.J.Cutan. Pathol., 1997,6: 208-12
- [4] KennedyC,terHurne,J,BerkhoutMetal.Melanocortin1ReceptorMC1Rgene variants are associated with an increased risk for cutaneous melanoma wich is largely independent of skin type and hair color. J Invest Dermatol 2001; 117: 294-300.
- [5] CID JM. Melanoid pigmentation of the endocervix : a neurogenic visceral argument. Ann Anat Pathol (Paris) 2009; 4:617-28.
- [6] Cobellis L., Abeler VM., Kristensen GB., Kaern J., TropeC.Malignant melanoma of the vagina. Are pat of 15 cases. Eur Gynecol. Oncol., 2000, 21 (3): 295-7
- [7] Katherine Y. Look., Roth LM., Sutton GP. Vulvar melanomareconsidered. Cancer, 1993, 72 (1): 143-46
- [8] Négrier S, Fervers B, Bailly Christiane. A propos de recommandations sur la prise en charge de patients atteints de mélanome. Presse Med 2000; 29 : 1295- 1298.
- [9] Haute Autorité de santé Service évaluation médico-économique et santé publique Rapport stratégie de prise en charge précoce du mélanome. Octobre 2006
- [10] Seetharamu,N.,Ott,P.A.andPavlick,A.C.(2010)Mucosalmelanomas:Acase- based review of the literature. The Oncologist, 15, 772-781. doi:10.1634/theoncologist.2010-0067
- [11] VerschraegenCF,BenjapibalM,SupakarapongkulW,etal.Vulvarmelanomaat the M.D. Anderson Cancer Center: 25 years later. Int J Gynecol Cancer 2001;11: 359–64.
- Thomas Luc., Secchi T., Barrut D., Moulin G. conduit à tenir devant une pigmentation vulvaire Reprod. Hum. Horm., 1996, 9 (1) :13-16.
- [13] Management of primary melanoma of the female urogenital tract. Lancet Oncol 2008; 9:973–981.