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RESEARCH ARTICLE

ABDOMINAL-PELVIC MASS REVEALING A KRUKENBERG TUMOUR: A CASE REPPORT

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Abstract

Krukenbergtumors are ovarian metastases from non-gynecological, mainly gastrointestinal cancers, such as gastric and colorectal cancers. They are very rare with a stillpoorlyelucidatedetio-pathogenesis(1). Previousretrospectivestudies have suggestedthatKrukenbergtumors are associatedwithapoor prognosis compared to metastaticdiseaseatother sites resultingfrom the sameprimarydisease(2).We report here the observation of a patient whoconsulted for an abdominopelvic mass withoutothersymptomsrevealing a Krukenbergtumortreatedat the Mohamed 6 center for onco-gynecology.

Introduction:-

Krukenbergtumorisvery rare and presents only 1 to 2% of ovarian tumors. It is defined by unilateral or bilateral ovarian metastases of a glandular epithelium, characterized by the presence of mucus-secretingcells in a "chaton ring" at the ovarianlevel(3).We report here the observation of a patient whoconsulted for an abdominopelvic mass withoutothersymptomsrevealing a Krukenbergtumortreatedat the Mohamed 6 center for onco-gynecology.

Observation:-

Mrs. A.M aged 41, followed for 4 years for dysthyroidism on synthetic anti-thyroiddrugs (Carbimazole), Mitral insufficiency on beta-blocker (avlocardyl*), Aspegic and diuretics, havingconsulted for abdominal distension dating back two months, with sensations of pelvic heaviness then rapidly progressive abdominal distension without digestive or urinarysigns

Abdominal examinationrevealedenormous distension with a mass arriving above the umbilicaltilted to the right (figure 1). The gynecological examination found a normal-looking cervix, clean vaginal walls and a normal-sized uterus. The rest of the clinicalexaminationwasunremarkable

The pelvicultrasoundrevealed a lobulatedabdomino-pelvic mass withirregular contours in places, heterogeneous measuring approximately 11cm in diameter, this mass comes into intimate contact with the anterior wall of the

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uterus associated with a low abundance pelvic effusion and at the level pouch of Douglas as well as multiple lumbo-aortic abdominal adenopathies infra-centimetric (figure 2).

An abdomino-pelvic CT scan wasperformed, havingdescribed the abdomino-pelvic mass as being a voluminous mass above the midline and right paramedianbladdermeasuring 18*17*13.5cm, cominginto contact with the right antero-lateral abdominal wall. It is in intimate contact with the coecum, whichispushed back and outwards, inside with hail loops, and it also comes into contact with the primitive iliac vessels. It is associated with a second mass of the same characteristic of the left iliac seat measuring 7.7*7.4*4.9 mm. The two formations seem to depend on the uteruswith the presence of infra-centimetricnodes of the obturatorchain and bilateralexternaliliac (figure 3).

Regardingtumor markers: Ca19-9: 887, Ca125: 311.60, ACE: 1.62, AFP: 4.1

The patient underwentsurgical exploration, finding moderately abundant peritoneal effusion, with no peritoneal nodules associated with two solid ovarian masses 17cm long and a normal-sized uterus. exploration of the rest of the peritoneal cavity is unremarkable (the digestive tract was unremarkable apart from an ischemicappearanceat the level of the biopsied Douglas-fir cul-de-sac).The search for malignantcells on the ascites fluidsamplewascarried out. A leftadnexectomywasperformed and sent extemporaneously: presence of an invasive tumor proliferation with kitten-ring cells suggesting a secondary origin in the first digestive tract.A right adnexectomyfollowed by omentectomy and appendectomywassubsequentlyperformed.

Discussion:-

Krukenbergtumorisvery rare and presents only 1 to 2% of ovarian tumors. It is defined by unilateral or bilateral ovarian metastases of a glandular epithelium, characterized by the presence of mucus-secretingcells in a “chaton ring” at the ovarianlevel(3).

Described for the first time in 1895, it still raises questions; the main one is the mode of neoplastic dissemination that may exist between the primary cancer and the ovarian metastasis. The spread is certainly early in many cases. Primary cancers, particularly those of the stomach, are indeedverysmall in size, whereas the ovariantumorisalready large(4).

This tumor affects women during the period of genital activity. The average age reported in the literatureis 40 years, whichis close to our patient(5).

Krukenberg'stumors are crude and the specific signs are poorsothattheycanbediscoveredintraoperatively or evenbe a surprise on anatomo-pathologicalexamination. This discovery is made in 2/3 of cases before the primarytumour, whichexplainstheirpoorprognosis(6).The main warning sign in our observation was abdominal distension which followed the feeling of heaviness.The search for malignantcells on a sample of ascites fluid allows the demonstration, under an optical microscope, of kitten-ring cellswhichsecretemucin, characteristic of Krukenberg'stumor (7).

Imaging may show masses at the expense of the ovary, solido-cystic multi-lobularwithsigns of malignancy (locoregional extension, peritoneal nodules). Bilateral tumors are predominant. But radiological examinations do not in any way allow the primaryovariantumor to bedifferentiatedfromasecondarytumor (9).

The histological study is the only one that can confirm the diagnosis. Microscopically, Krukenberg'stumorischaracterized by the presence of epitheliomatouscells in "chaton ring" with an eccentric nucleus filledwithmuci-carminophilic mucus, isolated or grouped in clusters within fibrils and by a pseudo-sarcomatousproliferation of the stroma(10).

CA 125 is the marker mostfrequentlyused by authors in Krukenbergtumours. In fact, he is the most often high scorer. It can play a role in early detection of ovarian metastases, in follow-up and even prognosis. The authorsfoundthatsurvivalisinverselyproportional to the level of CA125(7).

The primary cancer isin 90% of cases of digestive originincluding 70% gastric, 14% colonic, 5% pancreatico-biliary and 2% appendicular; even more rarelymammary and thyroid (11).

The treatment is initially surgical and consists of a total hysterectomywithoutadnexalpreservation (HTSA) withomentectomy for the ovariantumour.The primary digestive tumordiagnosedsecondarilywouldbetreatedaccording to itsevolutionary stage (12).

At present, the prognosis remains grim. The average survival reported in the literatureis 12 monthsafter the onset of diagnosis (6).

The best-known prognostic factors are: late diagnosis, significant ovarian symptoms, pleural and/or peritoneal effusion, young woman in period of genitalactivity, non-aggressivetreatment and poorchronology of surgicalprocedures (12).

Conclusion:-

Krukenbergtumors are alwaysa real challenge for practitioners; hence the interest of a systematicgynecologicalexaminationbeforeany digestive process and vice versa.

Figure:

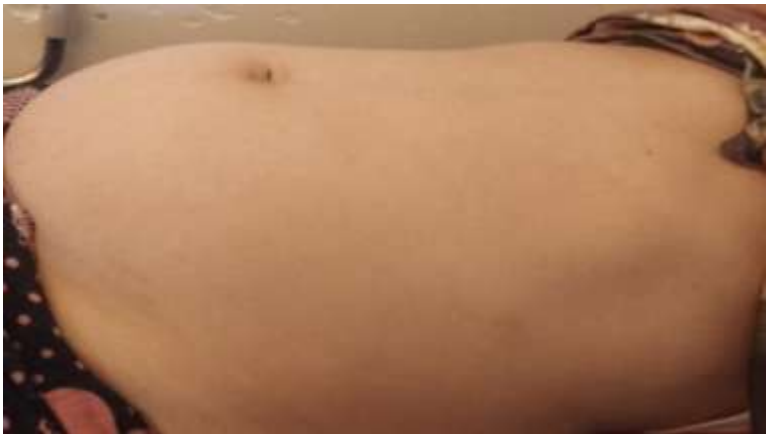

Figure 1:- Clinical image of abdominopelvicdistentionwithpresence of adnexal mass.

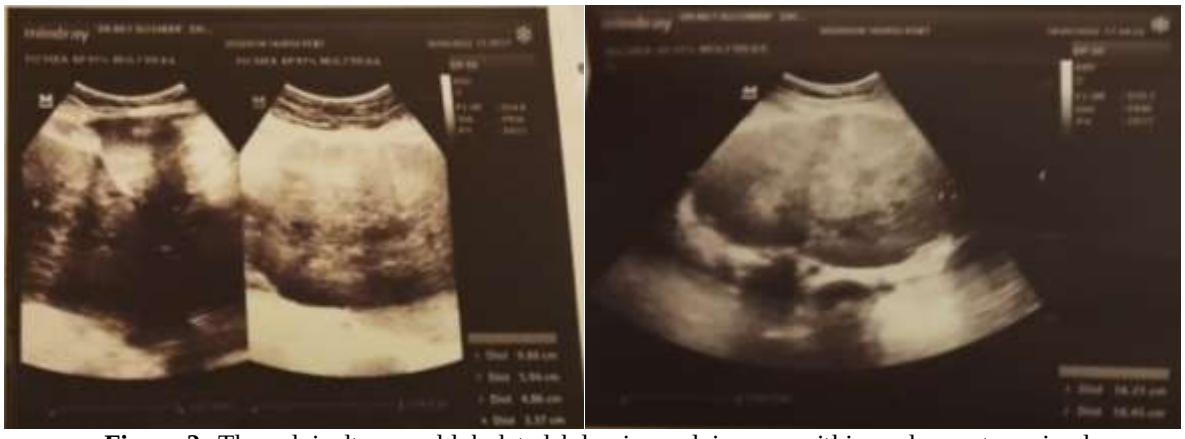

Figure 2:-The pelvicultrasound:lobulatedabdomino-pelvic mass withirregular contours in places.

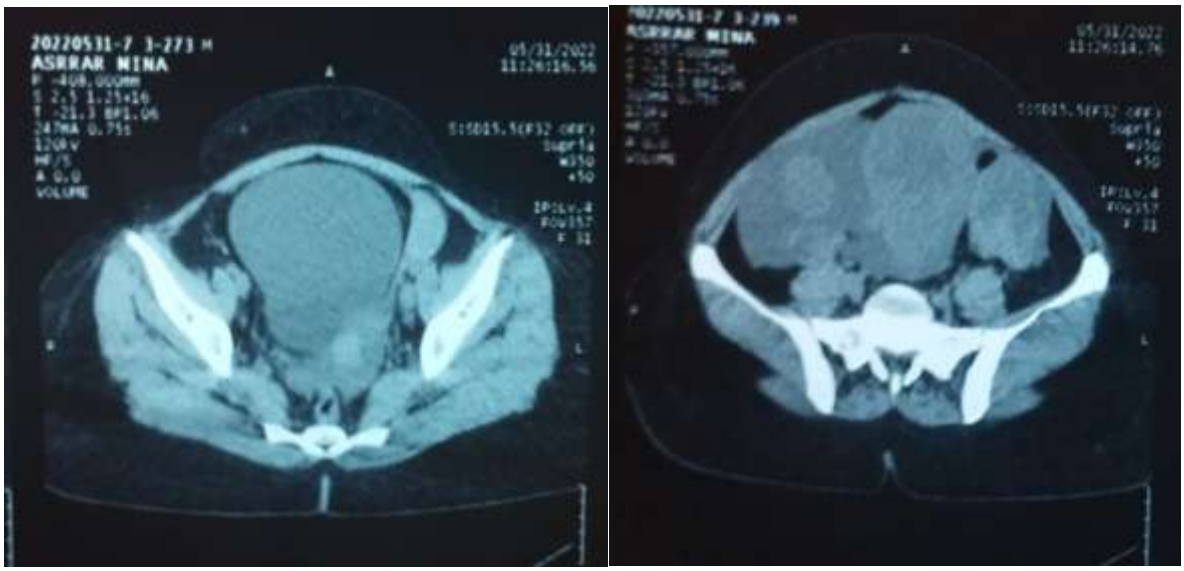

Figure 3:- An abdomino-pelvic CT scan described the abdomino-pelvic mass as being a voluminous mass.

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