Case report

RECURRENT MICROSCOPIC GRANULOSA CELL TUMOR OF THE OVARY 21 YEARS AFTER INITIAL OPERATION

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Granulosa cell tumors of the ovary are rare hormonally active neoplasms characterized by endocrine manifestations, an indolent course, and late relapse. These tumors have preponderance for local spread and extremely late recurrence and high survival rates. Late recurrence can be extensive with initial, clinically undetectable, microscopic granulosa cell tumor of the ovary. Only a small percentage of such tumors metastasize.

We report a case of a 71-year-old woman with extensive recurrent granulosa cell tumor of the ovary 21 years after undergoing abdominal hysterectomy and bilateral salpingo-oophorectomy for atypical endometrial hyperplasia. 20 years after the initial treatment, she was well without evidence of the disease. 21 years after the initial treatment, abdominal pain was abrupt followed by unstable vital signs. Under the impression of internal bleeding, immediate laparotomy was performed. Macroscopic examination revealed predominantly cystic mass filled with clotted blood and separated by solid tissue. Biopsy showed granulosa cell tumor of the ovary. A thorough staging surgery included lymph node sampling, partial omentectomy and excision of any suspicion lesions within the abdominal cavity. The final pathologic expertise confirmed malignant granulosa cell tumor of the ovary. At the pathohystological re-expertise of the first operation material, the diagnosis of the initial, microscopic granulosa cell tumor of the ovary was confirmed. By pathological analysis of the second operation material, the diagnosis of malignant granulosa cell tumor of the ovary was confirmed.

Autors describe a case of microscopic granulosa cell tumor of the ovary, which recurred 21 years after the original surgery. Late recurrence can be extensive with initial, clinically undetectable, microscopic granulosa cell tumor of the ovary. Patients must be monitored closely after a diagnosis of ovarian granulosa cell tumor, even if the tumor is occult. This case report emphasises the need for long-term follow-up in patients with granulosa cell tumors of the ovary and considers the possibility of recurrence when presented with acute abdomen after conservative treatment. *Acta Medica Medianae 2007;46(3): 62-65.*

***Key words**: granulosa cell tumor of the ovary, microscopic, late recurrence, acute abdomen*

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Induction

Granulosa cell tumors (GCT) are reare ovary tumors with incident from 5-10% of all ovary tumors.GCT is concidering with low gradius malignity wuth good supose and extraovary growing which can happen and after 20 years of initial diagnose.GCT is hormonicaly active tumor and it can happen in every period of life,with pick of incidence in 5th and 6th decade. Because the endocrine manifestation is often many GCT were diagnosed in early stadium of disease. More than half of GCT develops at women in postmenopause (2). The fiveyearly survival is 55-97% (3). However, the clinical behaveing cannot be predicted surely, on the base of convecional clinicaly-patalog parameters. The characteristics of these tumors are low malig potential and tendention of local spearing, and high probabilizy of reapearing, some times after many years even after first diagnose.GCT is rearly very agrresive. Their growth is calling,in most cases, trom.

The ability of local spreding makes granulose cell tumors uniqe between malig ovary tumors.There are thoughts that recurent tumors begin from peritoneum, on the place of contact of primary tumor and lower abdomen or pelvic structures (5). Many works document these ability of local spreading,which requires multiple surgery oftenly (6). The reapearing can be canceled for very long period (7).

Table 1. Granulosa cell tumor of the ovary

The year of birth, job	1934, housewife
Parity	2
Menarch	13 j
Menopause	50 j
Oldnes	45 y.(irregular bleeding)
First explorative ciretage	1984: hyperplasio glandularis cystica endometrii polyposa
First surgery 1984.	HTC+AB
PH DG (1.op.)	Leiomyoma uteri. Cervicitis chronica limfocitaria partim egzulcerans. Cystis follicularis ovarii
Revision PH DG (1.op.).	The same cause of presence of multiple granulosa cell focus. Dg: Tu granulosocellulare billateralis (Mixed form)
Second surgery 2005.	Tu abdominis. Relaparotomia explorativa. Tumorectomia PH:1.Tu granulosocellulare redivans maligna 2. Infiltratio peritonei 3.nod.ly. 0

HTC (Hysterectomy); AB(Adnexectmy bill); PH (Patohystological diagnosis)

The show of the case

Our patient was born in the year of 1934. She had her first menstruation in her 13th year, and last in 50th. In peproductive anamnesa 2 deliveries. No losts of babies. Period of menstuation is regular to 45th. Year and after that its irregular. Irregularity is meno-metroragy type. Explorative ciretage has been done in the year of 2005. Patohystolic found: Hyperplasia glandularis cystica endometric polyposa. Because of constative, irregular, too much fetus bleeding and chronical anemia, the hysterotcomia with adnextomia was given as a solution to a patient in her 50th year of life.She had a surgery. There was no incidents during the surgery and after. She was released from the hospital in overall good condition. PH found:Lei,omioma uteri. Cer-viticis chronica limfocitaria partim egzulcerans. Cystis follicularis ovarii.The patient didnt had a solution of postoprative therapy, but she was given the ability of ginecologic control. After the surgery, the patient was fine.In her first post-operative year, she had regulary ginecologic controls. Few years later her visits were less.She didnt have health problems, and she was physicaly active in the next 20 years.

The first difficultes started 21st year after the surgery such as pains in little breech and belly. She went to a doctor and he gave her a syptomic therapy. She was better at the begining, but after she lost her weight and apetite. The difficultes are getting intensive. The phisical view is compatabile with acutive abdomen. The urgent ultrasound shows tumor mass or absces. The simptoms and signs shows that hospitalistion and urgent surgery are needed. Explorative lapartomia shows abdominal tumor of cistic build size of a head of newborn baby and weight of 1150 g. Tumor has been fixed in the litlle breech. The tumortomia has been done, with limfdenectomia and partial omenctomia Except tumor, the samples of omentum was pointed to pathohistolic expertize. Using pathohistolic expertize the malig granulosa cell tumor of the ovary was diagnosed. After the first surgery, in the year of 1984, hysterctomia with adnextomia, the pathohistolicly the granulosa cell tumor of the ovary hasnt been diagnosed, but the folicular cists on both ovary has. The PH reexpertize was asked. Using reexperize the presence of multple focuse of granulosa begin was noticed. With 21 year of late the diagnose of granulosa cell tumor of ovary has been set. The patient didint had any difficultes for 21 year, precieclsy from 1st to 2nd surgery.

Discusion

We report a case of 71-year old woman with extensive reccurent granulosa cell tumor of the ovary 21 years after undergoing abdominal hysterctomy and bilateral salpingo-oophorectomy for atypical endometrial hyperplasia. From granulosa cell tumor which hasnt been diagnosed 21 year later, during first surgery, the malig granulosa cell tumor of the ovary was developed. These tumors are in most of cases indolent, can be back(7). However, it is very hard to determine which tumor, or surgery will be problematic. Our case shows need for long, lifetime folowing the patient with early stadium of disease, even when it looks like the granulosa cell tumor was completly removed.

The primary treatment of surgery can be folowed with postoperative treatment for patients with ovary disease. However the many patients with these disease were stoped by time because of the ovary and treated only with surgery, 25% of all of the patients will develop recurence after long interval and demand further treatment. However, the optimal treatment for women with big residal disease after the surgery or recurency is unknown (8). The only clinical factor is conected with recurency is stadium of disease, though the other factors, such the oldnes of patients, size of tumor and surgery can be prognosevly meaningful. The hystolic prognosive factor includes atipia and mitose (9). Our patint develpos recurence after long interval and demands furthure treatment. From initial surgery, 1984, to recurency, 2005, the patient had no difficulties. However, there is no such thing as a standard treatment for recurent disease, the repeting of surgery as sucsesfull method for control of

simptoms and survival is still using as usual work. Does surgery have more efficience than other forms of therapies such as chemotherapy, radiotherapy or hormonal therapy is unknown, because the results are contradictive (10). Our patient had 2 surgeries, initial 1984, and relaparatomia, 2005. The patients with local, recurent and metestatic tumors require chemotherapy, however the optimal regime stays to be determined (11).

The granulosa cell tumors of the ovary arent varieties of ovary neoplasmas, because they can reapear and cause death.

After initial granulosa cell tumor of the ovary, late recurent lesias can be diagnostical chalenge,especialy when there is no documentation about primary tumo, as in our case.Late recurent lesias had our attention and didnt give possibility for diagnose for primary microscopic granulosa cell tumor, which during 20 years had malig alteracy and become granulosa cell tumor of the ovary.

We described a case of 71 year old women with extensive recurrent granulosa cell tumor of the ovary 21 years after undergoing abdomunal hysterctomy and bilateralsalpingo-opherectomy for atypical hyperplasia. Reexpertize of pathohistolic material from primary surgery shows the presence of the microscopic granulosa cell tumor of the ovary which hasnt been detected 21 years earlier. From these fact we can give the conclusion that late recurences can be extensive even with intial, linicaly undetected, microscopic granulosa cell tumor of the ovary.

The detection of extra ovary metastazas on initial diagnose depend from many other factors including complete surgery exploration. The complete surgery exploration is limited at women with granulosa cell tumor of the ovary (11). It is simmilar with metastazas which arent detected in initial diagnose. It is possible that there are hidden nodal metastazas which are undetected in the moment on initial diagnose. There is a belive that granulosa cell tumor can become in retroperitoneal limph noduses (12). The long time folowing is neccesary in these cases because recurences can happen decades after initial diagnose, which we showed in our case.

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REKURENTNI MIKROSKOPSKI GRANULOZOCELULARNI TUMOR OVARIJUMA 21 GODINU NAKON PRVE OPERACIJE

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Granulozocelularni tumori ovarijuma su retke, hormonski aktivne neoplazme koje se karakterišu endokrinim manifestacijama, indolentnim tokom i kasnim relapsom. Ovi tumori imaju sposobnost lokalnog širenja, ekstremno kasnog ponovnog javljanja uz visoku stopu preživljavanja. Kasna ponovna javljanja mogu biti ekstenzivna i nekada sa početnim, klinički nedetektabilnim, mikroskopskim granulozacelularnim tumorom ovarijuma. Samo mali procenat ovih tumora metastazira.

Opisujemo slučaj 71-godišnje bolesnice sa ekstenzivnim, rekurentnim granulozocelularnim tumorom jajnika 21 godinu nakon abdominalne histerktomije sa obostranom adneksektomijom zbog atipične endometrijalne hiperplazije. 20 godina nakon inicijalnog tretmana, bolesnica je bez evidentnih dokaza bolesti. Godinu dana kasnije, osetila je jak abdominalni bol koji je bio praćen nestabilnošću vitalnih parametara. Pod utiskom da se radi o abdominalnom krvarenju i akutnom abdomenu, urađena je urgentna laparotomija. Intraoperativno, makroskopskim pregledom otkrivena je predominantno cistična masa veličine 20x18x15 cm, ispunjena koagulisanom krvlju i odvojena od solidnog tkiva koje je okružuje. Učinjene biopsije ukazale su da se radi o granulozocelularnom tumoru ovarijuma. Hirurško stadiranje, sem opisanog tumora, uključilo je uzorke limfnih žlezda, deo omentuma i sve ekscidirane suspektne lezije unutar abdominalne šupljine. Finalna patohistološka ekspertiza potvrdila je da se radi o malignom granulozocelularnom tumoru ovarijuma. Na patohistološkoj reekspertizi materijala iz prve operacije, dijagnostikovan je inicijalni, mikroskopski granulozocelularni tumor ovarijuma. Patohistološkom analizom materijala iz druge operacije dijagnostikovan je maligni granulozocelularni tumor ovarijuma.

Autori opisuju slučaj mikroskopskog granulozocelularnog tumora jajnika, koji se ponovo javlja 21 godinu nakon primarne operacije. Kasne rekurence mogu biti ekstenzivne i sa inicijalnim, klinički nedetektabilnim, mikroskopskim granulozocelularnim tumorom jajnika. Bolesnik mora biti praćen nakon dijagnoze ovarijalnog granulozocelularnog tumora, posebno ako je tumor okultan. Ovaj slučaj ukazuje na neophodnost doživotnog praćenja bolesnika kod kojih su ovakavi tumori uklonjeni. *Acta Medica Medianae 2007;46(3):62-65.*

Ključne reči: *granulozocelularni tumor jajnika, mikroskopski, kasne rekurence, akutni abdomen*