Ovarian Teratoma Fistulating to the Skin

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ABSTRACT

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Observation: The patient had undergone appendectomy in 2001. Two subumbilical fistulous orifices had appeared on the scar with nauseous yellowish liquid. The diagnosis of fistulized dermoid cyst was made intraoperatively during the exploratory laparotomy. The evolution was favorable, with a simple operative follow-up.

Conclusion: The diagnosis is histological. A conservative treatment is recommended knowing that the haunting remains a degeneration in women who are already menopausal.

Keywords: complications; ovary; teratoma.

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I. BACKGROUND

Mature ovarian teratoma is a benign tumor of the ovary derived from pluripotent germ cells. However, some aspects of its pathology, classification and management remain unclear. Also known as dermoid cyst, it accounts for 10-20% of all ovarian tumors [1]. The localisation is bilateral in 10% of cases. Infection may be complicated by rupture of the membrane in the peritoneal cavity [2]. Our case reports a right ovarian teratoma infiltrating the left ovary and fistulating. The aim of our observation is to discuss the diagnostic means and surgery for a dermoid cyst of the ovary.

II. OBSERVATION

A 45-year-old woman had had a fistulized abscess in her abdomen. Her gynecological and obstetrical history was marked by repeated dysmenorrhea since her menarche, six pregnancies including one that was terminated with intrauterine curettage in 2001. The patient had an appendectomy in 2001. Her menopause occurred in 2011. Two sub umbilical fistulous orifices had appeared on the scar with an inexhaustible foul-smelling yellowish liquid. His general state was preserved, without fever. The hemoglobin level was 12g/dL and the leucocyte level 4G/L. The rest of the tests also showed no particularity. Ultrasonography showed an intraperitoneal fluid collection communicating to the skin through the abdominal wall. The open midline laparotomy confirmed the continuity of the fistula with the abdominal wall. The right ovary had presented a recent ovarian mass with pasty contents and embryonic remnants (hair, teeth). The mass measured 10 X 10 cm. It adhered strongly to the rectus and to the bladder. The left ovary had also fistulized to the right ovary.

A bilateral adnexectomy was performed. The cyst was ruptured at the time of dissection but without dissemination of its contents into the peritoneum. No digestive wound was found. A drain was put in place and maintained for two days. Immediately after the operation, the patient was transferred to the ward. She had benefited from biantibiotherapy for seven days. The transit had resumed on D2 postoperatively. The postoperative rehabilitation was early. The evolution was favorable with complete healing after ten days.

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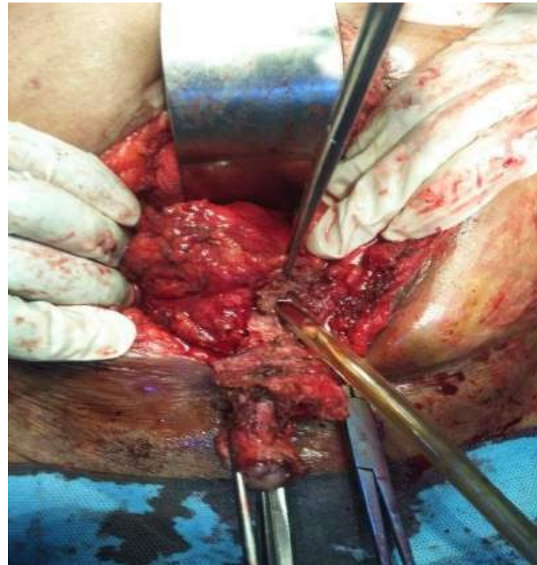

Image 1: Intraoperative image showing fistula trajectory at the expense of dermoid cyst
Source: Department of Visceral Surgery,Joseph Ravoahangy Andrianavalona University Hospital Center,Antananarivo,Madagascer

III. DISCUSSION

Our patient was 45 years old. In the literature the peak age is between 20 and 30. Although it is a germinal tumor arising from remnant embryonic tissue, it can be observed at any age. This is due to its nature that can be silent for a long time [1]. There is a right predominance of unilateral forms, and the cyst is bilateral in 10% of cases. Our patient had presented a right ovarian teratoma fistulating on the left ovary [3, 4]. Spontaneous rupture is the second most frequent complication in 0.3 to 2% of cases. It may be iatrogenic following puncture or ovarian cystectomy [2,3]. The main risk of a ruptured dermoid cyst is the development of chemical peritonitis by releasing deposits of neutral fat, fatty acid crystals, cholesterol, and epidermal cells in the abdomen. In reported cases, the clinical signs may also be a pelvic mass syndrome, a chronic pelvic pain [1].

Abdominal ultrasound is the first diagnosis examination of ovarian teratoma. Abdominal pelvic CT scan may reveal a cystic, fluid-dense process with rounded calcifications and irregular thickened wall [5]. Only histological examination can confirm the germinal nature of the tumor, as well as confirm its benign nature or the degeneration of the teratoma. In our observation, abdominal ultrasonography objectified an intraperitoneal fluid collection with a fistulous path to the skin.

Laparoscopic ovarian cystectomy remains the standard gold standard in the treatment of benign cysts of the unruptured ovary. Our case was an already fistulated teratoma adhering strongly to the wall. A laparotomy was necessary to reduce the risk of viscerolysis [6]. Cystectomy makes it possible to preserve as much as possible of the capital of primordial follicles for women of childbearing age. However, in postmenopausal women, adnexectomy is recommended to reduce the risk of iatrogenic rupture of the cyst and to prevent a lesser risk of ovarian teratoma degeneration. Laparoscopy is increasingly preferred in developed countries for the resection of dermoid cysts [7]. This technique is less

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invasive and preserves the integrity of the ovarian tissue by being less aggressive, but nevertheless presents a greater risk of rupture of the cyst [6]. Laparoscopic conservative approach to borderline ovarian tumors remains a potentially safe alternative for young women who wish to preserve their potential of procreation. The recurrence rate after pregnancy is not influenced by this approach [7]. The fistula trajectory in our clinical case had favored adhesions, which motivated the surgeon to perform open surgery from the outset. In the case of an intraoperative rupture like ours, it is recommended to perform a lavage with warm saline solution of the peritoneal cavity to avoid the secondary occurrence of chemical peritonitis. This procedure minimizes this risk to less than 1%.

A systematic check of the contralateral ovary intraoperatively as well as a postoperative pelvic ultrasound scan allows the condition of both ovaries to be assessed later to detect any impact on the fertility of young women.

While mature teratomas are slow-growing cystic lesions, immature teratomas can degenerate with incomplete resection. In some literature, immature teratomas are classified as malignant germ cell tumors because of their ability to metastasize [8,9,10]. Grade 3 immature teratomas have a highly malignant potential and their rapid local and distant progression is responsible for higher recurrence and death rates with a 5-year survival rate of 90-100% with chemotherapy [11].

IV. CONCLUSION

The diagnosis of a dermoid cyst is histological [11]. A cystectomy is preferred in women of childbearing age. Laparoscopy is increasingly indicated, but laparotomy is indicated for large cysts [6]. Conservative treatment is recommended, bearing in mind that a degeneration in women who have already reached menopause is possible [5].

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