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**Address for Correspondence:**Editorial Room Andalas Obstetrics and Gynecology Journal, 3<sup>rd</sup> floor of KSM of Obstetrics and Gynecology, RSUP DR. M. Djamil Padang, Jl. Perintis Kemerdekaan Padang, Sumatera Barat 25127**Website:**<http://jurnalobgin.fk.unand.ac.id/index.php/JOE>**CASE REPORT****Primary Fallopian Tube Carcinoma : A Case Report**Rijalul Abrar<sup>1</sup>, Syamel Muhammad<sup>2</sup>

*Affiliation author* : 1. Obstetrics and Gynecology, Faculty of Medicine, Andalas University, Dr. M. Djamil Central General Hospital Padang; 2. Sub Division of Gynecological Oncology, Obstetrics and Gynecology Department, Faculty of Medicine, Andalas University, Dr. M. Djamil Central General Hospital Padang

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**Abstract**

**Objective:** To report the case of primary fallopian tube carcinoma metastatic to cervix and omentum, but not infiltrate the ovarium

**Method:** Case Report

**Case:** A 40 years old woman presented with gradual onset pain and swelling of the abdomen. The patient was diagnosed with suspected ovarian carcinoma. After examination, the patient prepared for laparotomy; salpingo-oophorectomy, omentectomy, mass resection from pelvic and rectum

**Result:** The hystological examination result was high grade serous carcinoma from the fallopian tube metastasis to cavum douglas and omentum. This case is a rare case because the tubal carcinoma was metastasis to cavum douglas and omentum without infiltrate the ovarium.

**Discussion:** Primary carcinoma of the fallopian tube is rare and accounts for about 0.14-1.8% of all gynecological malignancies. Clinically the diagnose of tubal carcinoma very similar to ovarian cancer, the diagnose can not distinguished pre operative. The new staging of FIGO may be reference for diagnostic and treatment of the desease. Thorough staging laparotomy is an important part of early management and systemic treatment.

**Keywords:** tubal carcinoma, PFTC, metastasis, high grade serous carcinoma

**INTRODUCTION**

Primary fallopian tube carcinoma (PFTC) is a very rare gynecologic malignant tumor and accounts for approximately 0.14-1.8% of female genital malignancies.<sup>1-7</sup> Its incidence has been rising during the last decades and varied between 2.9/1,000,000 and 5.7/1,000,000.<sup>8</sup> Histologic, molecular and genetic evidence shows that from 40-60% of tumours that were classified as high-grade serous carcinomas of the ovary or peritoneum may have originated in the fimbrial and of the fallopian tube. Therefore the incidence of fallopian tube cancers may have been underestimated<sup>9</sup>. The aetiology of this tumour is unknown enough; it is suggested to be associated with chronic tubal inflammation, infertility, tuberculous salpingitis and tubal endometriosis<sup>10</sup>. Clinical symptoms and sings are non-specific and include lower abdominal, pelvic pain, serosanguinous vaginal discharge and pelvic mass. The rate of preoperative diagnosis was in the range of 0%-10% and most cases it is an intraoperative finding or a histopathological diagnosis<sup>11,12</sup>. We are reporting a rare case of fallopian tube carcinoma in a 40-year-old female, with a review of the literature.

## METHODS

We present a 40-year-old women, married with gravid 2, para 2, living child 2 (Parity Index – G2P2L2), with no significant personal or family history. Her two deliveries were spontaneous vaginal deliveries. She presented with the complaints of severe lower abdominal pain that had occurred for the previous three months. The abdominal pain was a dull ache in the right lower abdomen which propagated to the back. The vaginal discharge and bleeding was absent. For her medical history, she didn't had any congenital and familial disease. On the admission day, her blood pressure was 110/80 mmHg, the pulse rate was 84 beats per minute, and her temperature was 37°C. She had already tried conservative treatment, which had not improved the symptoms. From the laboratory, the routine blood result were normal, hepatic and renal functions were normal. Blood sugar and urine examination also normal.

On the physical examination was noticed left lateral lower quadrant tenderness. The pelvic examination revealed a normal sized anteverted uterus with cervical motion and adnexal tenderness. Speculum examination showed a healthy cervix and vagina.

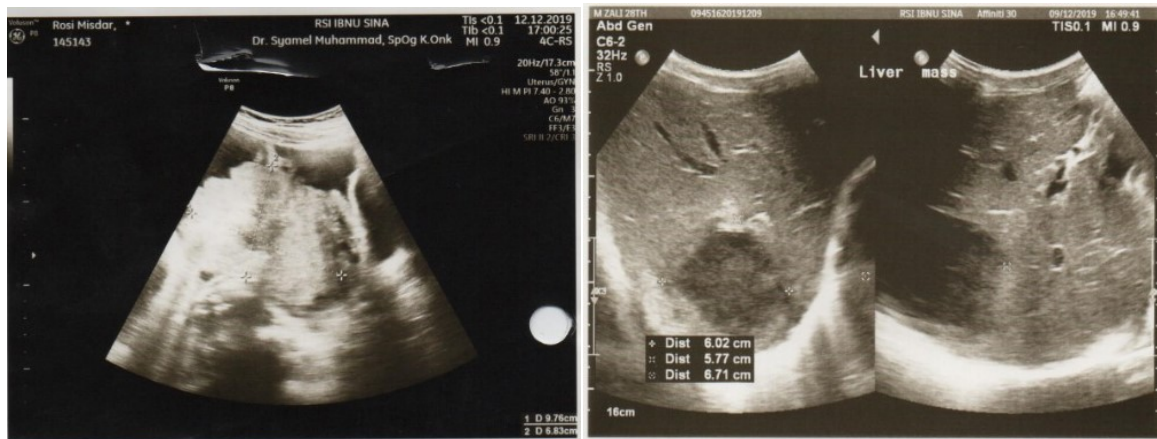
Transabdominal sonography showed uterus with normal echostructure, measuring 56,6x50,9x38 mm. In the left ovary there were solid mass on the left adnexa measured 97,6x68,3 m, irregular shape with no calcification. Unclear flow vascular intra lesion. There were massive free fluid intra abdomen. On the sonograph also found intrahepatal mass size 60,2x57,7x67,1 mm. The computerised tomography did not performed. From the laboratory had Hemoglobine 11,0 gr/dL, Trombocytes 596.000 gr/dL, dan Leukocyte 6.600 gr/dL.





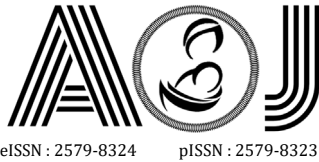
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Based on the clinical result, the patient previously the patient was diagnosed with suspected ovarian carcinoma and prepared for laparotomy. In exploratory laparotomy was found hydrosalpinx on the left side, mass in the left ovary with severe adhesions between the left adnexa, sigmoid uterus and rectum. The patient underwent bilateral salpingo-oophorectomy, omentectomy with adhesiolysis and peritoneal washing was performed. The uterus was left in because of the severe adhesive of the sigmoid and rectum. The bilateral ovarian masses, fallopian tubes, omentum and sample of peritoneal washing were sent for histopathological analysis.





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From the histopathologic examination showed *high grade serous karsinoma* of the fallopian tube with metastation to the cavum douglas and omentum with no metastation to ovarium.

The FIGO stage of this case were defined as III C, where the cancer are on one or both of the ovarium or fallopian tube, or there were primary carcinoma on the peritoneum and spread through out the pelvic. In this case the pre-operative diagnosis was incorrect. The fact that Fallopian tube carcinomas are almost difficult to diagnose preoperatively due to the rarity and silent course of this neoplasm. The patient was discharged and prepared for chemotherapy.

**DISCUSSION**

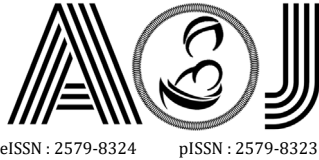
Primary Fallopian tube carcinoma is the rarest malignancy of the female genital tract and was first described by Renand in 1897<sup>17</sup>. Rokitansky recorded the first microscopic description in 1861 and Orthman presented a first case report in 1888<sup>18</sup>. Clinically and histologically (PFTC) resemble epithelial ovarian cancer (EOC), and it is difficult to distinguish from serious epithelial ovarian cancer or primary peritoneal serous carcinoma during or after operation<sup>19</sup>. EOC is often diagnosed at an advanced stage, but PFTC usually found in an early stage, because of abdominal pain from tubal distension and a shorter history of symptoms in PFTC than in EOC<sup>20</sup>. The aetiology of this cancer is unknown. High parity has been reported to be protective, and use of oral contraceptives and pregnancy decreases the risk of PFTC<sup>8</sup>. Most patients with PFTC are postmenopausal. The peak incidence is between the ages 60 and 64 years, with the mean age of incidence being 55 years (age range 17-88 years)<sup>21</sup>.

This patient still at the age of 40. She doesn't have a predisposing factor. Pelvic inflammatory disease, nulliparity and subfertility were not present in this case.

The clinical symptoms and signs of PFTC are not specific. The most common symptoms and signs are abdominal pain, which may be colicky as a result of forced tubal peristalsis or dull as a result of tubal distension and vaginal bleeding or watery discharge<sup>22</sup>. The Latzko's triad of typical symptoms consists of intermittent profuse serosanguinous vaginal bleeding, colicky pain relieved by discharge and an abdominal or pelvic mass. This triad was reported in only 15% of PFTC cases<sup>14</sup>.

In this case, not all of these symptoms were presented, we did not find any vaginal bleeding or discharge. In most cases, the preoperative diagnosis of PFTC is extremely rare<sup>23</sup>. The rate of preoperative diagnosis was in the range of 0%-10%<sup>24</sup>, and up to 50% are missed intraoperatively<sup>25</sup>.

PFTC should be included in the differential diagnosis and if the patient has clinical symptoms such as vaginal discharge or abnormal genital bleeding or spotting with negative diagnostic curettage. Pap smear positivity occurs in 10%-36% of cases<sup>14,26</sup>.



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Pre operative diagnostic was still unclear, we did not perform curettage and Pap smear. And also we did not evaluate the CA-125 level in this patient. Ca-125 is a useful tumour marker for the diagnosis, assessment of response to treatment and detection of tumour recurrence during follow-up. 80% of patients with PFTC have elevated pretreatment serum levels of CA 125<sup>27</sup>.

The diagnostic criteria for PFTC were first established by Hu and colleagues and later slightly modified by Sidles. Accordingly, PFTC is diagnosed if: grossly, the main tumor is in the tube and arises from the endo salpinx; the histological pattern reproduces the epithelium of tubal mucosa; transition from benign to malignant tubal epithelium should be demonstrated, and ovaries and endometrium are either normal or have a much smaller tumor volume than that of the tube<sup>28,29</sup>.

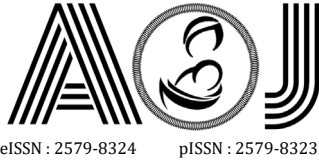
Approximately 90% of ovarian cancers are carcinomas (malignant epithelial tumors) and based on histopathology, immunohistochemistry and molecular genetic analyzes, at least 5 main types are currently distinguished: high-grade serous carcinoma (HGSC, 70%); endometrioid carcinoma (EC, 10%); clear-cell carcinoma (CCC, 10%); mucinous carcinoma (MC, 3%); and low-grade serous carcinoma (LGSC, <5%)<sup>30</sup>.

Imaging for suspected gynecologic malignancies includes ultrasound, computed tomography (CT) scan and magnetic resonance imaging (MRI) of the abdomen. Transvaginal and transabdominal ultrasound is the simplest and usually initial imaging investigation. Although the ultrasound findings of tubal carcinoma are nonspecific and mimic other pelvic diseases such as an ovarian tumour or tube-ovarian abscess, several findings may provide a diagnostic clue preoperatively. The echogram may show a cystic mass with spaces and mural nodules, a sausage-shaped mass or a multilobular mass with a cog-and-wheel appearance<sup>31,32</sup>.

The lesion can have the appearance of a small, solid, lobulated mass on CT scan or MRI. On CT scan, a solid papillary intratubal mass allows for easy prediction of PFTC. MRI is considered a better method than CT or ultrasound for detecting tumour infiltration of extramural organs<sup>33</sup>.

Surgery is the treatment of choice for PFTC and is similar to that for ovarian carcinoma-cytoreductive surgery with the removal of the tumour as much as possible. The procedure of choice is total abdominal hysterectomy, bilateral salpingo-oophorectomy, omentectomy, selective pelvic and para-aortic lymphadenectomy for any stage of fallopian tube carcinoma<sup>9,13</sup>. Postoperative platinum- based combination adjuvant chemotherapy is the most commonly used therapy for these patients, similar to EOC patients. The role of postoperative radiotherapy is even less clear<sup>4,9</sup>.

The reported overall responses rates are 53-92%. The stage of disease at the time of diagnosis is the most important factor affecting the prognosis<sup>6</sup>. The other prognostic factors



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include the residual volume of the tumour after cytoreduction, the presence of ascites and the histologic grade of the tumour <sup>6,9</sup>.

**CONCLUSION**

In conclusion, primary fallopian tube carcinoma is a rare gynecologic malignancy that accounts for less than 1% of all malignancies of the female genitalia. Preoperative diagnosis of fallopian tube carcinoma is difficult due to the silent course of this neoplasm and is usually first appreciated at the time of operation or by a pathologist. PFTC histologically and clinically resembles epithelial ovarian carcinoma. The symptom complex of “hydros tube pro fluenta” said to be pathognomonic for this tumour, is rarely encountered. It should be considered in differential diagnosis of peri and postmenopausal women who present with unexplained uterine bleeding, pelvic pain, adnexal mass, abnormal cervical smear and complicated pelvic inflammatory disease. The treatment approach is similar to that of ovarian carcinoma, and it should consist of a total abdominal hysterectomy with bilateral salpingo-oophorectomy, omentectomy and lymph node dissection from the pelvic and the para-aortic regions.

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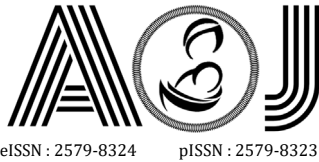


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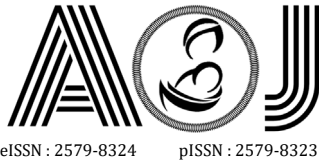
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