**ANDALAS OBSTETRICS AND GYNECOLOGY JOURNAL**
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Editorial Room Andalas Obstetrics and Gynecology Journal, 3rd floor of KSM of Obstetrics and Gynecology, RSUP DR. M. Djamil Padang, Jl. Perintis Kemerdekaan Padang, Sumatera Barat 25127

eISSN : 2579-8324 pISSN : 2579-8323

***Website:***
*http://jurnalobgin.fk.unand.ac.id/index.php/JOE*

CASE REPORT

# Myxoid ovaries that resemble malignancy in young girls: a case report

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## *Abstract*

In the most recent publications on Mayer-Rokitansky-Küster-Hauser (MRKH) Myxoma is a benign tumor that generally occurs in the heart, soft tissue, muscle, skin and bone. But in this case, we present myxoma that occurs primarily in the ovary. Ovarian myxsoma is a rare benign tumor.In this case report, it was found that a 12-year-old girl was brought by her parents to the M. Djamil Hospital in the city of Padang, West Sumatra. After performing the gynecological physical examination and ultrasonography, there was a hypoechoic mass with an indeterminate solid part of the right adnexa, which was suspected of being an ovarian malignancy. Then it was decided to carry out a procedure in the form of a conservative surgical staging laparotomy. The results of the Anatomical Pathology examination confirmed the myxoid ovarian appearance and the patient was decided for regular monitoring.

***Keywords:*** *Ovarian myxoma, benign ovarian tumor, young age*

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# INTRODUCTION

Ovarian myxoma is a fairly rare condition that is a distinct entity (2). Histologically, this tumor resulted from cells in random order in a myxoid matrix without infiltrative, growth pattern, mitotic activity, cytologic atypia or necrosis.

Data on the management of ovarian myxomas are scarce and are mostly extrapolated from isolated case reports or small histopathological series. This rare tumor was first mentioned in 1960 in a 14 year old case. In 1991, Eichorn reported five cases he personally observed and reviewed the additional three cases described previously (2). We found seven additional isolated cases with acceptable, albeit limited, clinical documentation. Thus, a total of 15 cases have been reviewed to date. Ovarian myxoma occurs frequently in women of reproductive age (9/16 cases, including us, aged 40 years), with a peak incidence between the ages of 12 and 25 years (n = 9/16, 56%). Available clinical characteristics, management, and outcomes of nine 40 year old cases. Ovarian masses in young women require

careful consideration of maintaining fertility function if preoperative suspicion of malignancy is low and there is no evidence of intraoperative malignancy. However, ovarian myxoma was traditionally treated by unilateral oophorectomy even in women of reproductive age (n = 8/8).

In the January 2018 issue of the Balkan Medical Journal, Bedir et al. (1) report a new case of ovarian myxoma, a very rare ovarian tumor. Although ovarian myxoma is a benign tumor that occurs mainly in young women where fertility function is a major concern.

# CASE REPORT

A 12 year old girl accompanied by her parents entered through the oncology-gynecology polyclinic with a referral from Semen Padang Hospital. The patient previously underwent a series of examinations at SPH with a provisional diagnosis of suspected appendicitis and an exploratory laparoscopic procedure was performed by the pediatric surgery department. During and from the Laparoscopic procedure it was concluded that there were no signs of infection of the appendix or other anatomical sites

which is a sign of impacted appendix but there is a mass in the cavity of Douglas. Therefore, the patient was referred to RSUP DR. M. Djamil for further investigation.

After further anamnesis and physical examination, there was pain in the abdomen (+) since 2 months ago, enlarged abdomen (- ), bleeding from the genitals (-), the patient had not menstruated, defecation and urination were normal. Furthermore, the patient was directed to the oncology-gynecology department for an initial examination in the form of an ultrasound. From the results of the ultrasound examination it appears that the anteflexi uterus measures 4.56 cm x 2 cm, with an endline (+). The appearance of a hypoechoic adnexa with a solid area measuring 4.53 cm x 3.74 cm, ill-defined, vascular score 4, without acoustic shadow with suspected ovarian malignancy.

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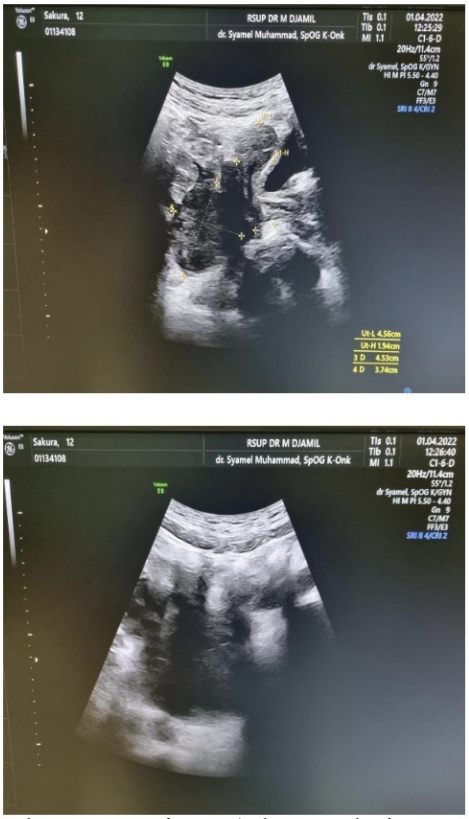


Figure 1. Ultrasound photo overview. A hypoechoic mass with a size of 4.53 cm x 3.74 cm was seen with irregular boundaries and a solid mass.

It was then decided to perform a surgical procedure in the form of a conservative surgical staging Laparotomy. Intraoperatively, a mass was obtained from the right ovary, uterus and left ovary within normal limits, no lymph node enlargement was found, no masses were seen in the colon, omentum, liver, ileum and peritoneum.

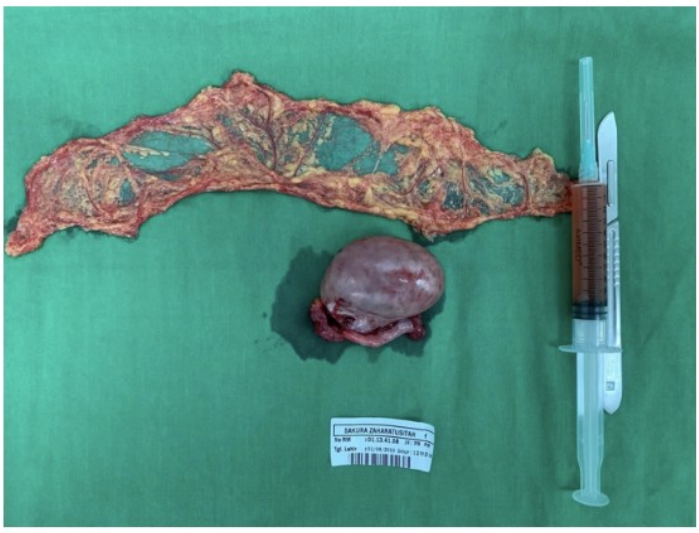

Figure 2. The mass of the ovarian tumor after total removal of the left ovary, oom and peritoneal fluid amounted to 10 cc. (no enlargement of the lymph nodes)

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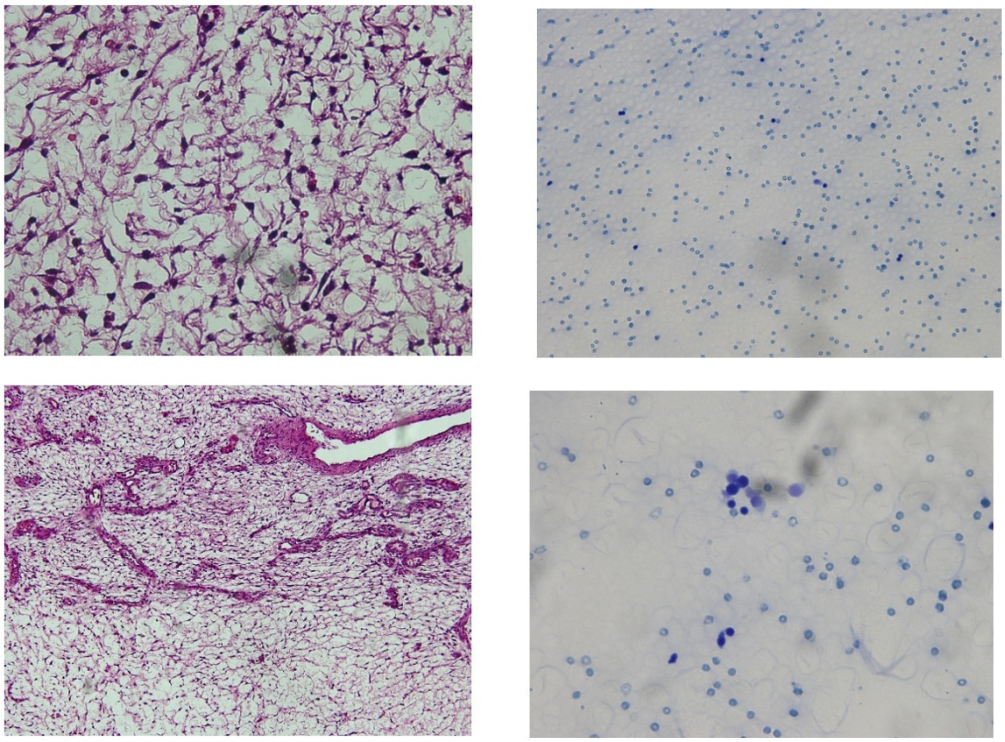

Figure 3. Microscopic examination of the ovaries and omentum Microscopic examination of the ovarian and omental tissues found a connective tissue stroma containing proliferating cells with oval-spindle nuclei, hyperchromatic against a myxoid stroma background and adipose tissue containing hyperemic capillaries. It can also be seen that the tubal tissue and its projections are covered by cuboidal epithelium and no tumor cells are seen in this preparation.

In the peritoneal fluid observed by the Anatomical Pathology Laboratory, there is a microscopic distribution of mesothelial groups, lymphocytes and some PMN leukocytes. There were no malignant tumor cells in this preparation.

From the various examinations and procedures that have been carried out, the anatomical pathology department diagnosed the patient with Myxoma Uteri.

## DISCUSSION

In the case above, he was initially diagnosed with acute appendicitis, where the patient was controlled by the Semen Padang Hospital Children's Surgery Polyclinic and an exploratory laparoscopic procedure was carried out to find out more. Because the symptoms felt by patients are not specific to one particular case.

Intraoperatively, the pediatric surgeon on duty found no signs of appendicitis in the patient. From the laparoscopic procedure, a mass appeared in Douglas's cavity. With a temporary diagnosis of ovarian cysts, the pediatric surgeon immediately referred the patient to the Oncology-Gynecology polyclinic at M.Djamil Hospital Padang. Given that M. Djamil

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Hospital is a referral center hospital in West Sumatra with material for consideration of cases of cysts in girls who have not menstruated and are still 12 years old.

Through the initial stage of examination in the form of anamnesis, physical examination and ultrasonography (USG) it was found that there was a picture of a hypoechoic mass with an indistinct solid part on the right adnexa suspected of an ovarian malignancy. Furthermore, after scheduling the operation, it was decided to perform a conservative surgical staging laparotomy. Although ovarian myxomas are benign, their behavior is uncertain and relapses may be seen (3). In the literature, this condition is explained by the difficulty of total excision of the viscous material which can lead to recurrence. For that reason, total excision of the myxomatous ovarian tumor along with the adnexal structures is suggested. Increased mitotic activity, cellularity or nuclear atypia in tumors are helpful predictors in the estimation of recurrence

After that, the results of the surgical procedure were further examined histopathologically in the Anatomical Pathology Laboratory to ensure the initial diagnosis of this mass is a benign tumor and evidenced by the absence of signs of malignancy in the tissue examined. Henceforth, the recommended treatment plan for patients is periodic imaging examinations to monitor that there is no recurrence of this disease.

## CONCLUSION

Ovarian myxoma is rare, difficult to diagnose because of the non-specific symptoms felt by the patient. And the patient's age

Relatively younger ones are often misdiagnosed early and must be differentiated from other ovarian lesions with myxoid changes. Preoperative diagnosis is difficult, and a definite diagnosis can be made by histopathological examination. We believe that this tumor should be carefully differentiated from other benign and malignant myxoid lesions of the ovary because it appears to closely resemble other forms of ovarian malignancy.

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