

A RARE CASE OF OVARIAN CARCINOID ON MATURE CYSTIC TERATOMA IN A 45-YEAR-OLD PATIENT

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ABSTRACT

Primary insular carcinoid tumor of the ovary is a rare tumor and accounts for fewer than 1% of all cases of carcinoid in the body. Ovarian carcinoid tumors are categorized in four groups based on histopathologic patterns: insular, trabecular, mucinous, and strumal. The definitive diagnosis is possible only on postoperative examination of multiple tissue sections. Surgical excision is regarded as the first approach. We describe a case of a primary insular carcinoid tumor with maturated teratoma of the ovary measuring just 8 cm in maximal diameter.

KEYWORDS: Primary ovarian carcinoid; Insular carcinoid tumor; maturated teratoma.**INTRODUCTION**

Carcinoid tumors are uncommon neoplasms of the diffuse peripheral endocrine system and are characterized by the production of biogenic amines and various polypeptides.^[1]

Carcinoid tumors most commonly arise in the gastrointestinal tract and are found less frequently in the biliary tract, bronchi, and ovaries.^[2]

They most commonly occur in women over 50 years of age.^[3] Ovarian carcinoid tumors are categorized in four groups based on histopathologic patterns: insular, trabecular, mucinous, and stromal.^[2] They are also considered "specialized teratomas" due to the fact that they often contain mature or immature teratoid components.^[2]

CASE REPORT

A 45 year old female patient followed for a simple non reshaped cyst BIRADS 3 of the right breast, no previous surgical history, who presented a secondary amenorrhea of 2 years (gravida 3, para 3), the family history is represented by diabetes and hypercholesterolemia on the father.

The onset of the symptomatology dates back to one month ago with the onset of pelvic pain of a weightless

type, urinary signs such as pollakiuria, dysuria without digestive signs or associated metrorrhagia.

The clinical examination found a normotensive apyretic patient.

The abdominal examination found a soft abdomen, no palpable mass.

On vaginal examination found: abdomino-pelvic mass halfway to the umbilicus, no separation furrow with the uterus.

Breast examination is unremarkable.

Pelvic ultrasound: uterus measuring 6cmx 3 cm, atrophic endometrium, presence of a multilobular latero-uterine mass with thick partitions and thick walls, with a double solid and cystic component, vascularized with the appearance of hemorrhagic content in a compartment.

The biological work-up is normal except for the CA 19-9 antigen which is increased (43.2 IU/ml), CA125 is normal.

Bhcg is negative.

Cervico-vaginal smear: no intraepithelial lesions or signs of malignancy.

An exploratory laparotomy is considered one week later.

The patient was operated, the procedure performed was a left adnexectomy by laparotomy

Histopathological results showed:

Morphological appearance and immunohistochemical profile in favor of an insular carcinoid tumor associated with a mature pluritissular teratoma.



Figure 1: ultrasound shows: a multilobular latero-uterine mass with thick partitions and thick walls, with a double solid and cystic compon.

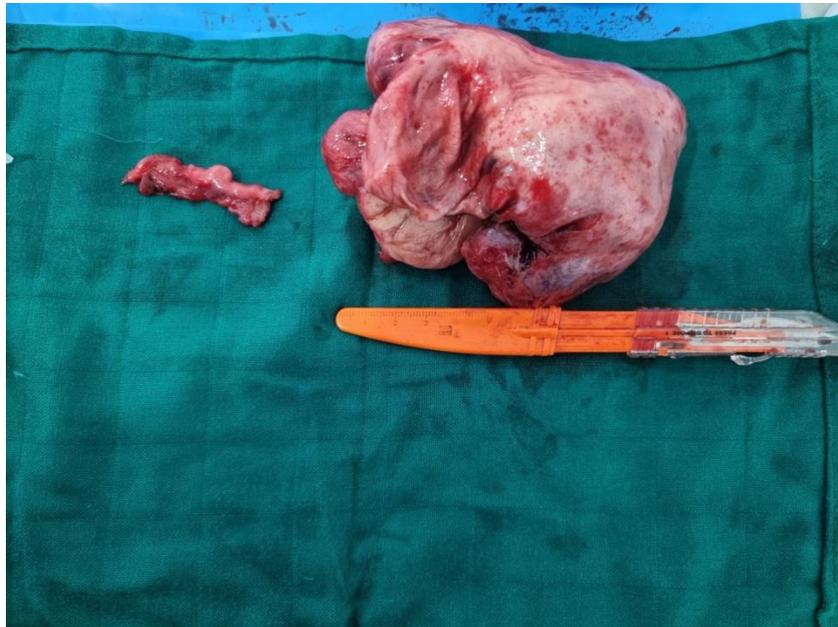


Figure 2: surgical part of a left adnexectomy.



Figure 3: Primary insular carcinoid tumor of the left ovary.

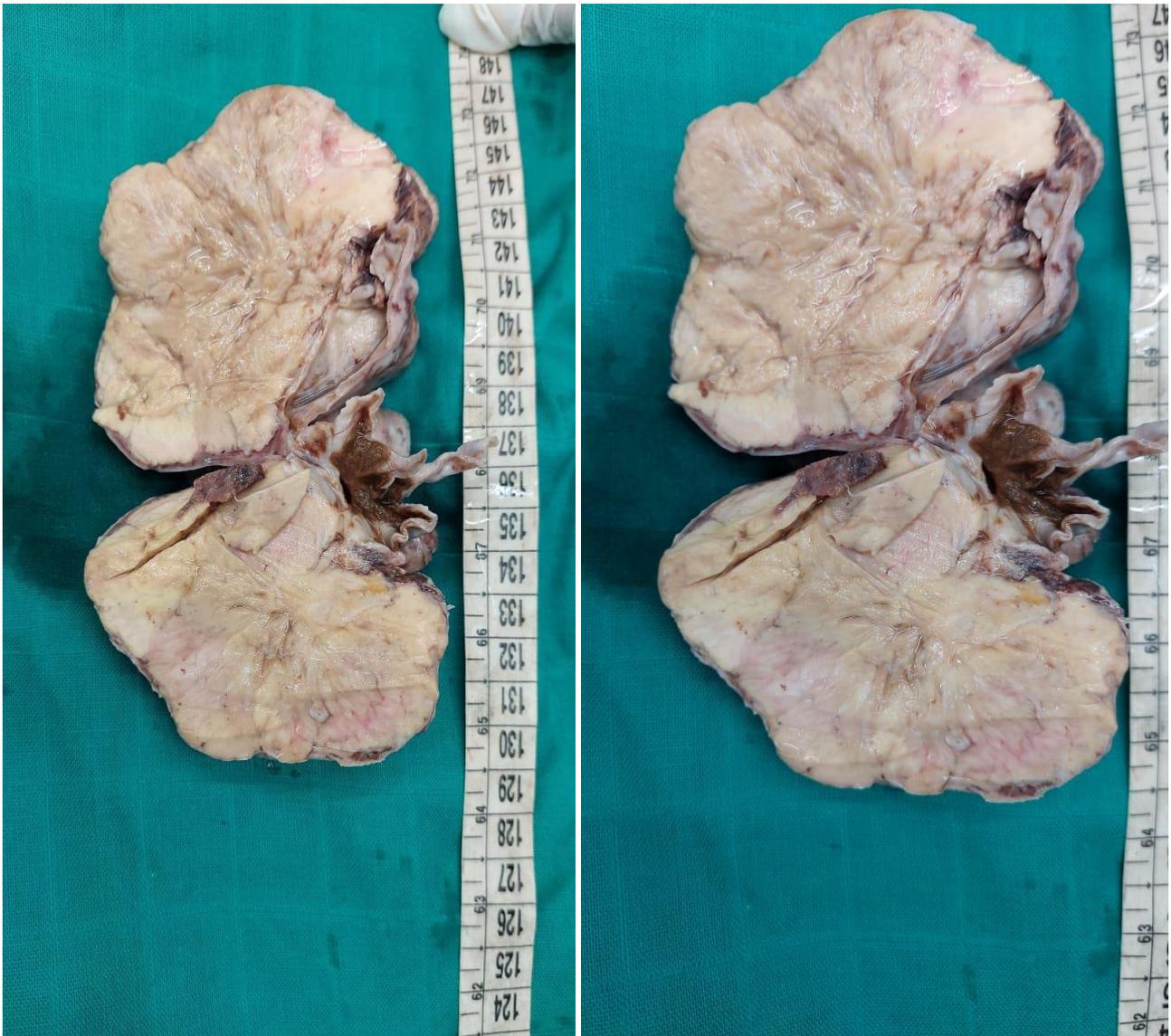


Figure 4: preparation of the surgical specimen for anatomopathological examination.

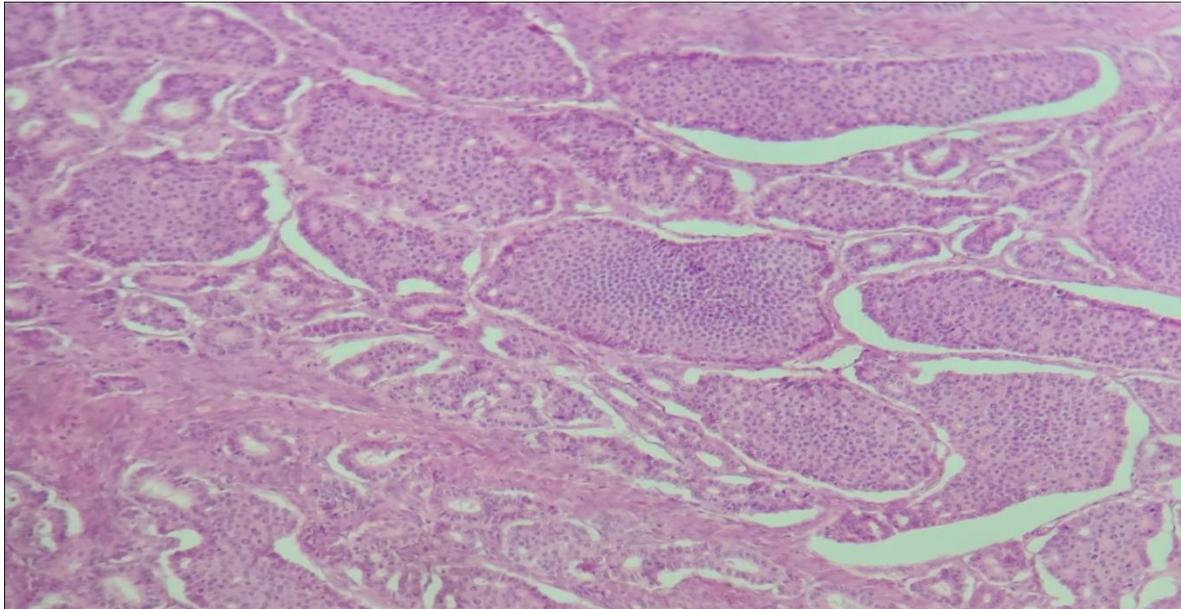


Figure 5: carcinomatous proliferation of insular and tubular architecture.

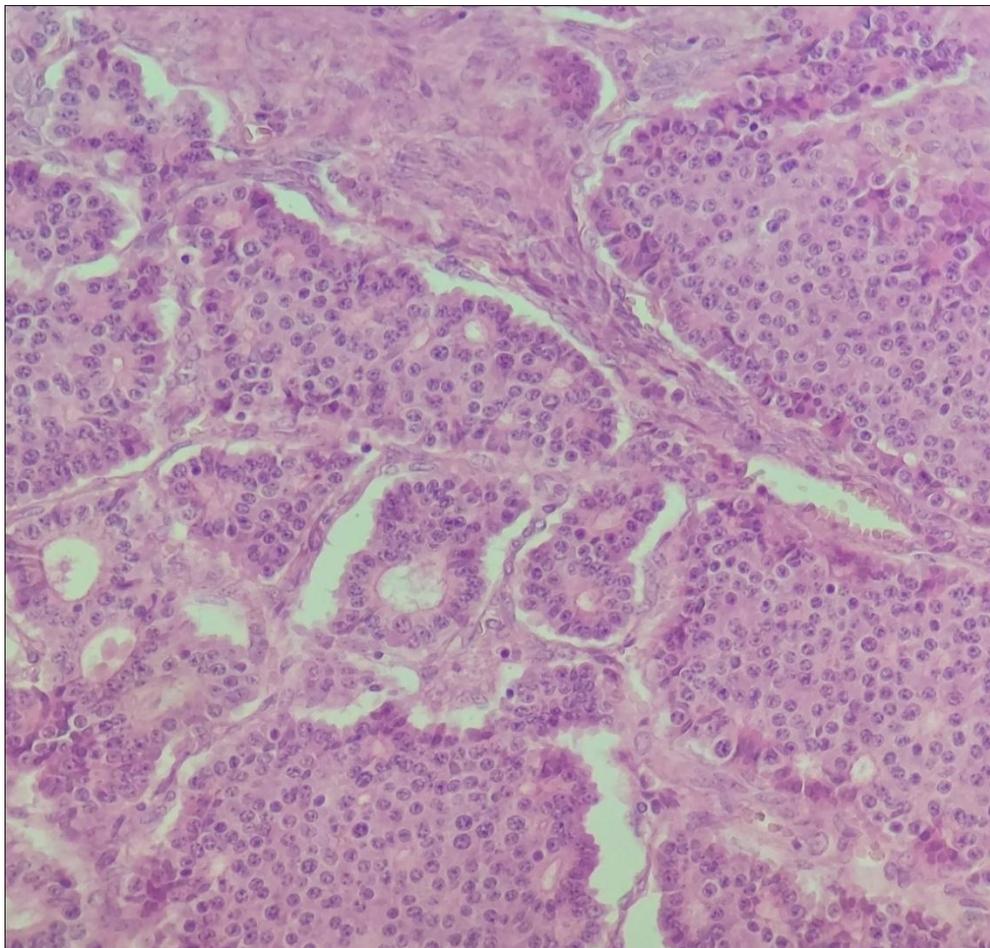


Figure 6: call-exner like rosettes of cells with monomorphic nuclei and granular chromatin.

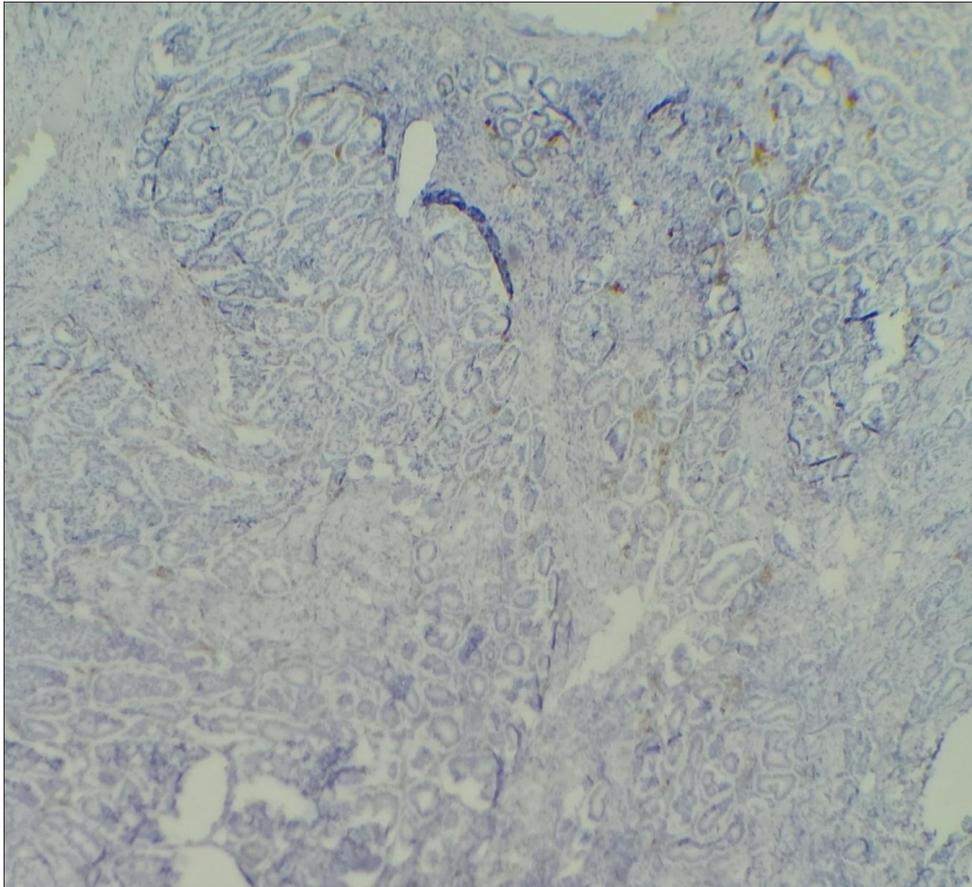


Figure 7: no anti-inhibin labelling.

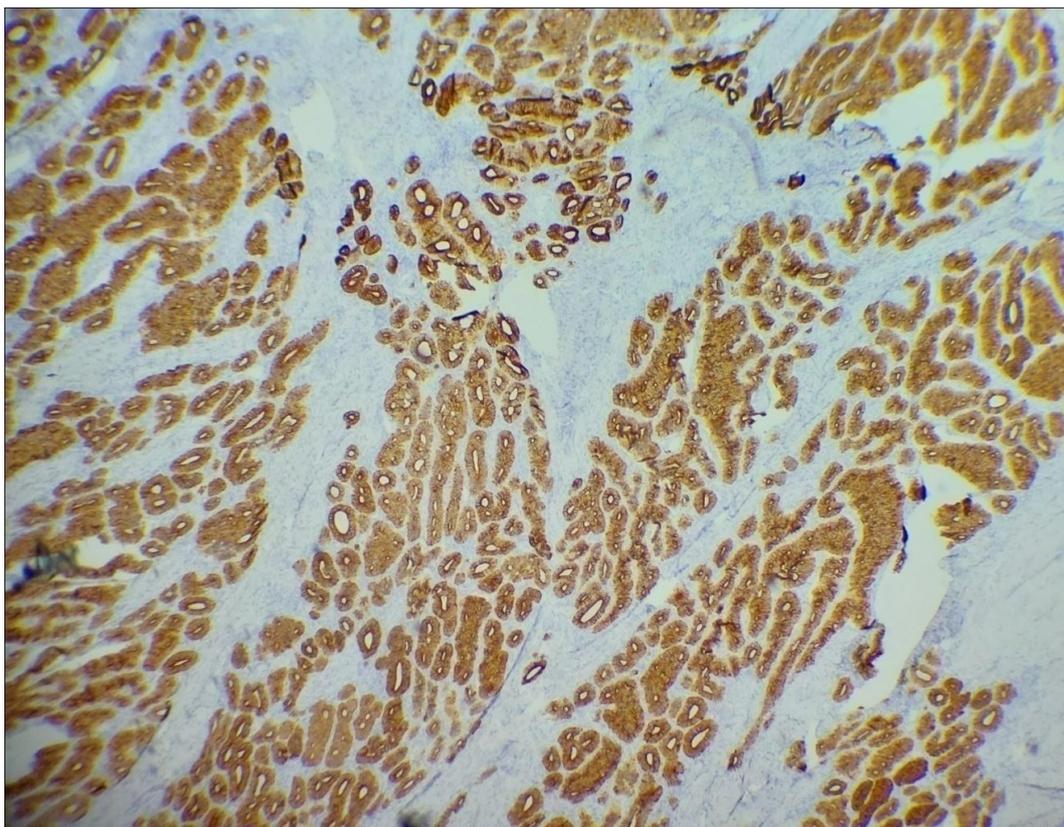


Figure 8: positive marking by anti-chromogranin A.

DISCUSSION

Theodor Langhans first described the histology of a carcinoid tumor in 1867. Otto Lubarsch first reported two patients with ileal carcinoid tumors discovered at autopsy, in 1888.^[4]

Ovarian carcinoid tumors may be primary or metastatic.^[8] Most primary ovarian carcinoid tumors are unilateral; however, in 16% of cases, the contralateral ovary displays a cystic teratoma or a mucinous neoplasm.^[6]

The majority of carcinoids are found within the gastrointestinal tract (55%) and bronchopulmonary region (30%). Small intestine is the most common site of carcinoids (45%), followed by the rectum (20%), appendix (17%), colon (11%) and stomach (7%).^[4]

Most patients with carcinoid tumours have no specific symptoms or displayed adnexal masses identified during physical examination.^[5] Many carcinoids resulted in clinical syndromes upon autocrine secretion of vasoactive substances. Some patients' main symptom was severe constipation.^[9]

Primary ovarian carcinoid tumors are classified into four types, the insular, trabecular, mucinous, and mixed types. The most common type is the insular type.^[10] Primary ovarian carcinoid tumors, in particular one third of the insular type, have been associated with the carcinoid syndrome despite the absence of metastasis.^[4] The other types of primary ovarian carcinoid tumors are not usually associated with carcinoid syndrome.

In the present case, the patient had a insular type carcinoid tumor and did not have any symptoms of carcinoid syndrome.

Preoperative diagnosis of MCT of the ovary can be made through radiologic findings considering the presence of the fat tissue, hairs, bone, and cartilage within the tumor. However, TMT is not easily recognized. In most cases, a definitive diagnosis is possible only on postoperative examination of multiple tissue sections.

The optimal treatment strategy for TMT remains the main challenge. Surgical excision is regarded as the first approach.^[7] A more aggressive surgical treatment may be considered according to the age of the patient. TMT usually occurs in postmenopausal women; therefore, radical surgery such as hysterectomy and bilateral salpingo-oophorectomy may be considered in such cases.

CONCLUSION

Clinical examination, histopathology, and imaging support are needed to decide whether or not to give further therapy. Survival has been shown to be lower as carcinoid tumor size increases.

Even though primary ovarian carcinoids are very rare, a high clinical index of suspicion must be maintained, especially in a patient presenting with carcinoid syndrome-like symptoms and an adnexal mass, irrespective of the size.

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