



## GIANT OVARIAN SEROUS CYSTADENOMA IN PATIENT AFFECTED BY COVID-19: EXPERIENCE OF AN EXCEPTIONAL CASE

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### ABSTRACT

In the last 40 years, humanity has been affected by three major pandemics that have claimed many deaths: the increase in the incidence and prevalence rates of chronic non-communicable diseases, the pandemic of the immunodeficiency virus disease human-AIDS (HIV / AIDS) and currently the pandemic caused by covid-19. Covid-19 is an emerging viral infectious disease, which has contributed to increasing mortality from chronic diseases in a very short time. Epidemics of unknown emerging diseases such as covid-19 put to the test not only the technical and human capacity of health professionals who directly care for the sick, but, and above all, that of health systems and society usually. For an adequate understanding of this phenomenon, they must be approached with a general approach that integrates many elements that, otherwise, can only give a partial vision of the matter. Due to the aforementioned, we consider it necessary to present this clinical case, based on ovarian pathology of a positive patient for the new coronavirus and its subsequent interdisciplinary management.

Giant ovarian cysts are considered this way when they weigh more than 12 kilos. They are a rare entity today. By definition, a cystic growth of the ovary must be at least 3 cm in diameter to be called a cyst.

In the 1970s and 1980s, 20 cases of cysts greater than 20 kg were reported in the world literature. Ovarian tumors are not as common as those of the uterus and breast. They constitute the third group of benign and malignant tumors in women. Ovarian serous cystadenoma arises from the superficial (coelomic) epithelium, made up of cystic areas.

There are macroscopically small tumors and massive tumors that occupy the entire pelvis and even the abdominal cavity. Until now, no literature has been found that gives us information on ovarian pathology during the course of the pandemic that we are now experiencing; reason for which this clinical case is presented.

**Objective:** Describe the adnexal pathology associated with covid-19 infection.

**Design:** Prospective, observational in a single center.

**Methodology:** This is a systematic review of adnexal pathology in a patient affected by the new coronavirus (Covid-19); emphasizing its clinical characteristics and its short-term complications. The information and images obtained belong to the medical staff in charge of the case, whose reinforcements are provided by the Excel, Word and JPG statistical package.

**KEYWORDS :** serous cystadenoma, ovarian neoplasms, covid-19.

### INTRODUCTION

Ovarian Tumors are a frequent pathology within the context of female pathology. For this reason, a large group of women consult both gynecology consultations and surgery itself. As the ovary is an organ of highly interrelated polymorphic characters, genetic factors such as embryological, ontogenetic, structural and functional, interact.

An enormous tumor capacity can emanate from this interaction: benign or malignant. So much so, that it is this organ that is universally accepted as the seat of various diseases. Malignant and benign serous tumors account for 30% of all ovarian tumors. Of these serous cysts, 10.5% are benign, 30.5% are Borderline, and 60.5% are malignant. The ratio of malignant and benign serous cysts is 1:9.

The ages range from early to advanced, with the risk of malignant degeneration being highly variable and related to age. The experience of the clinic reveals the high incidence of ovarian tumors in the climacteric stage, between 35 and 65 years of age.

There are macroscopically small tumors and massive tumors

that occupy the entire pelvis and even the abdominal cavity. These common unilocular cystic neoplasms are lined by tall, cylindrical, and ciliated epithelial cells, filled with clear, smooth-surfaced serous fluid with abundant vessels. Trans abdominal and transvaginal ultrasonography are applied in the first line, although with limitations, in studies for the evaluation of the pelvic mass; reason why it is usually complemented with computed tomography.

Ecuador and the world are facing a pandemic that has generated concerns regarding the therapeutic decisions that professionals must make. The evidence is in constant development regarding the knowledge of covid-19 and what is clear is that advanced age and the association of comorbidities are related to greater severity and inconvenience due to this viral infection. Due to the relevance of the case and associated with infection by covid-19, we encourage its presentation.

### CASE PRESENTATION

This is a 36-year-old female patient, born and resides in Latacunga, married, sportsman occupation (artistic gymnastics), with no personal, family or surgical pathological

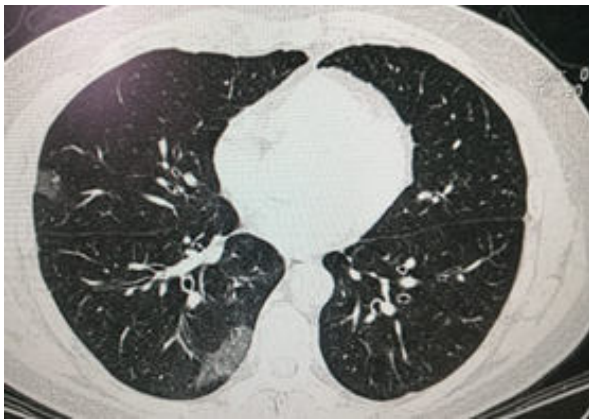
antecedents, her last menstruation date was 10/2020.

Without cognitive impairment, he went to a specialized hospital with a 2-month clinical picture of colicky abdominal pain, eva 7/10, sensation of pelvic mass, unquantified thermal rise, cough without expectoration; two members of his family had recently been diagnosed with covid-19.

Upon physical examination: Blood pressure: 120 / 80mmHg, Temperature of 38.5 °C, HR: 102 bpm, RR: 22 rpm; baseline saturation of 89%, which requires a reservoir at 1 bpm for 94% saturation.

Eutrophic, general appearance regular, auscultation with bilateral scattered crackles, abdomen palpable mass at the mobile pelvic level, painful; lower limbs do not edema.

In extension tests:leukocytes 11.50 Neutrophils: 88%, Hemoglobin 13.30 g / dl, BHCG: negative, creatinine: 0.6 mg / dl, Urea: 90 mg / dl, CRP: 4 mg / L, Lymphocyte 0, 22 mil / mcl, procalcitonin 1 ng / ml, CA 125 tumor markers: 50 U / mL, RT-PCR for covid-19 positive. Chest X-ray: bilateral diffuse opacities suggestive of viral infection (Covid-19). (Photo 1)



**Photo 1:** Coronal and axial chest CT: diffuse bilateral ground glass opacities

Due to a pelvic mass and once pregnancy had been ruled out, a simple and contrasted tomography of the abdomen and pelvis was requested. (Photo 2)



**Photo 2:** Tomography of the abdomen and pelvis S / C arterial

phase, sagittal, coronal and axial section: where a hypodense rounded image dependent on the right annex is observed, its edges are regular with septa inside the same that capture contrast, occupying the largest part of the right hemithorax and displaces intestinal loops in a cranial direction; It measures 22x 19cm, probably related to a giant right adnexal cyst

Once diagnosed with pneumonia due to covid-19 without severity criteria, and due to the presence of a giant right adnexal cyst on abdominal tomography, surgical intervention (laparotomy + cystectomy + right partial oophorectomy + right ovarian plasty) was performed, with surgical findings of a cystic mass of approximately 25 cm in diameter and 600 cc of seromucosal liquid content that compromises the right ovary, bleeding of approximately 100 cc. Treatment is based on ampicillin plus sulbactam 1.75mg iv every 8 hours, enoxaparin (7/7 days), ketorolac-type analgesic 30 mg iv every day. The histopathology of the lesion concluded right adnexal serous cystadenoma.

Patient remained hospitalized for 10 days, due to good evolution and decrease of inflammatory markers in laboratory tests, chest X-ray with less opacities, and baseline oxygenation of 90%, discharge and subsequent controls with clinical oncology were decided.

## DISCUSSION

With age, the human ovary ages in its functions; however, it never loses its ability to generate tumors. The neoplastic potential of the female gonad is widely known; ovarian neoplasia is observed in all stages of the woman's life.

The diversity of ovarian tumors is understandable by the complex histogenesis; all the histological components have the capacity to cause neoplasms of varied biological behavior. During the climacteric epithelial carcinomas predominate, followed in incidence by those of the gonadal stroma, which produce steroids; metastases reveal that the ovary is the seat of tumors originating from different organs, and germline cancers are rare.

Our case presented speaks of the most frequent adnexal pathology in middle-aged women, and that she also presented a picture of covid 19 confirmed with PCR, the same one that did not represent an aggravation of her pathology. Thanks to the development of surgery and diagnostic means, giant ovarian cysts are solved.

## CONCLUSIONS

The emergence of a human infectious disease caused by a new pathogen underscores the challenge of emerging infectious diseases and the importance of sustained preparedness to deal with it. Reason for which this clinical case was presented, which imposed a challenge on us for its proper management.

## CONFLICT OF INTERESTS

The authors declare that they have no conflict of interest.

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