



# SUBXIPHOID APPROACH FOR THE RESECTION OF ENLARGED SUPRADIAPHRAGMATIC LYMPH NODES DURING PRIMARY CYTOREDUCTION FOR ADVANCED OVARIAN CANCER: A CASE REPORT.



Tsolakidis D.<sup>1</sup>; Zouzoulas D.<sup>1</sup>; Pappas P.<sup>1</sup>; Pavlidi O.<sup>1</sup>; Bili E.<sup>1</sup>; Grimbizis G.<sup>1</sup>  
<sup>1</sup>1st Department of Obstetrics & Gynecology, AUTH, "Papageorgiou" Hospital

## Introduction

In ovarian cancer, metastatic cardiophrenic lymph nodes are associated with FIGO stage IV disease. The goal of debulking surgery should be no residual disease and resection of those lymph nodes is mandatory. The aim of this case report is to present the subxiphoid approach, as an alternative for the exploration of both supradiaphragmatic spaces from one incision, in contrast to the transdiaphragmatic approach.

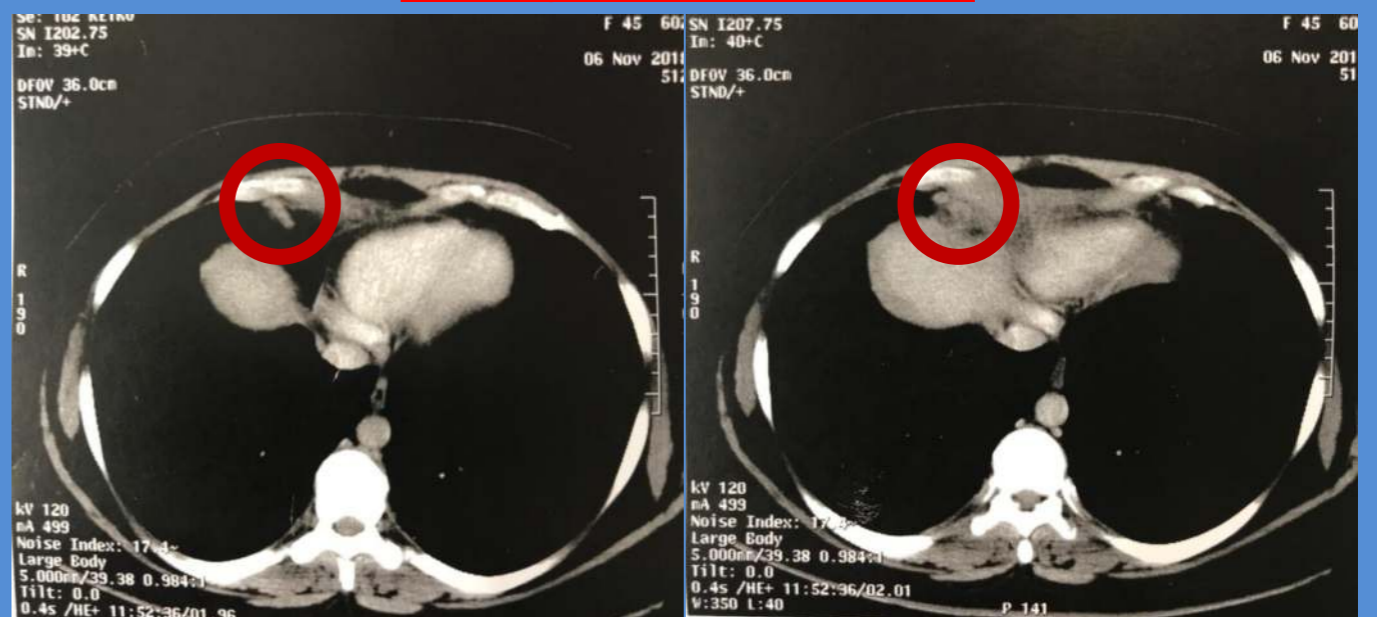
## Methods

The patient was a 45 years old female. Preoperative work-up revealed an elevated CA-125 of 2521 U/ml and a CT-scan showing a pelvic mass, ascites, omental cake, diaphragmatic disease and enlarged supradiaphragmatic lymph nodes, without pleural effusion. The patient underwent primary debulking surgery. Cytoreduction included type II radical oophorectomy (en bloc modified radical abdominal hysterectomy, bilateral salpingo-oophorectomy, pan-pelvic peritonectomy, rectosigmoid colectomy), appendicectomy, cholecystectomy, radical omentectomy, paracolic gutters peritonectomy, small – large bowel mesentery electro-coagulation, right diaphragm full-thickness resection and subxiphoid resection of supradiaphragmatic lymph nodes.

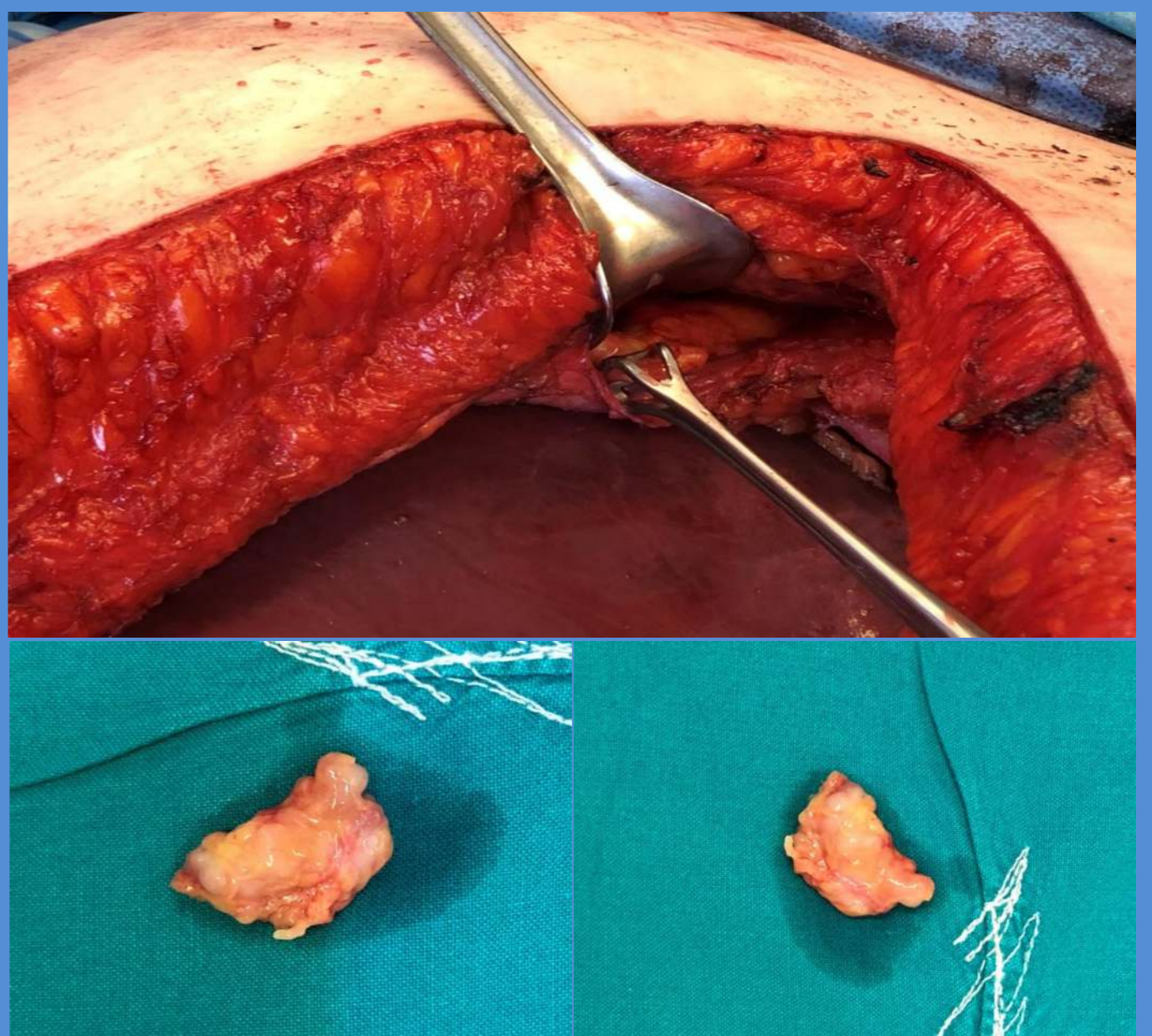
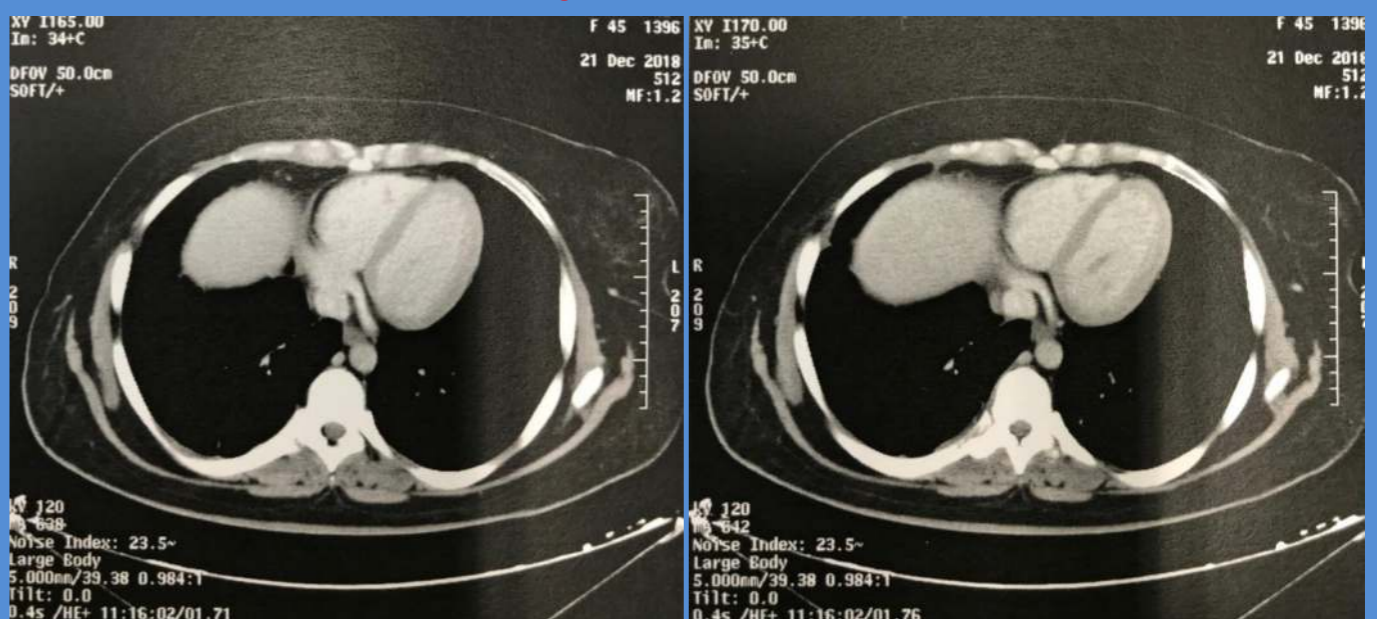
## Results

The supradiaphragmatic incision surgical steps included: subxiphoid peritoneal dissection, cutting of the transverse abdominis muscle, dissection of the retrosternal peritoneum laterally from the midline, digital development of the supradiaphragmatic space and removal of the enlarged lymph nodes. Total operative time was 450min and estimated blood loss 700ml, with no residual disease. Post-operative intensive care unit (ICU) admission was necessary for three days due to mild hemodynamic instability and the patient was discharged from hospital on the 17th postoperative day. The pathological report showed a grade III serous adenocarcinoma, with metastases to six of seven resected supradiaphragmatic lymph nodes.

## Pre-operative CT scan



## Post-operative CT scan



Subxiphoid peritoneal dissection

Transverse abdominis muscle cutting

Retrosternal peritoneum lateral dissection

Supradiaphragmatic space digital development

Enlarged lymph node removal

## Conclusions

Subxiphoid resection of supradiaphragmatic lymph nodes is a feasible alternative approach for the exploration of both cardiophrenic spaces with no direct diaphragmatic trauma.

## References

- Minig L. et al. A different surgical approach for cardiophrenic lymph node resection in advanced ovarian cancer. *Ecancermedicalscience*. 2017; 11:780.