



Northern Ontario  
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# Severe Three-Vessel Disease with Inducible Ischemia in a Patient with Metastatic Serous Adenocarcinoma of the Ovaries undergoing Palliative Chemotherapy

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## BACKGROUND AND PURPOSE:

- The two leading causes of mortality are cancer and coronary artery disease (CAD), posing increasingly tricky challenges as survival improves.
- Toxicities like bradycardia, ventricular arrhythmia, HF, hypertension, and myocardial ischemia have been ascribed to different chemotherapeutic agents.
- Several publications have reported potential cardiotoxic effects of carboplatin in combination with paclitaxel, developed more frequently if patients had a history of cardiovascular diseases.

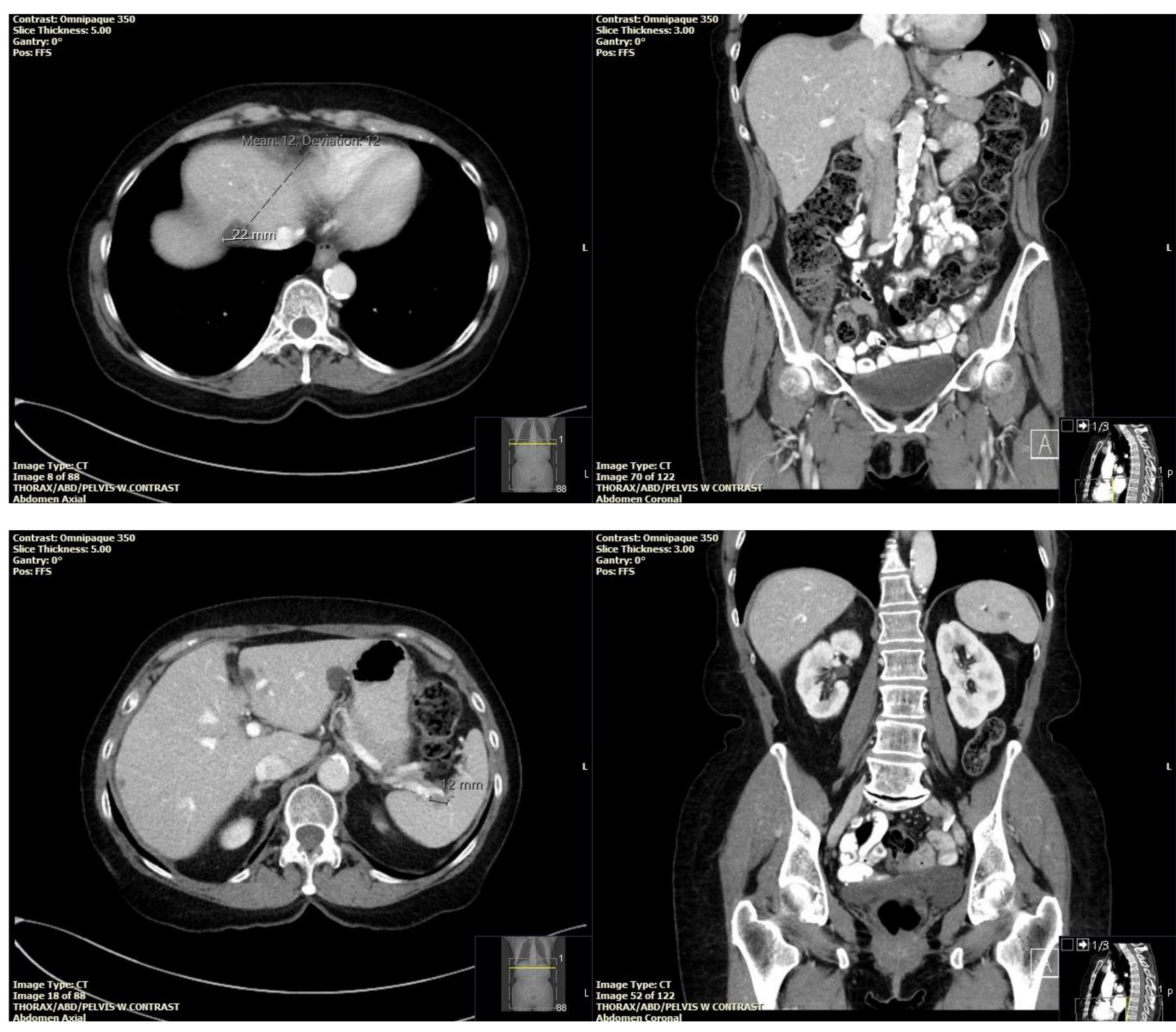


## DISCUSSION:

- One-and-a-half months post-TAH-BSO, she had disease progression with a new splenic lesion, increasing pelvic ascites, worsening omental infiltration, and peritoneal nodules for which she was started on palliative chemotherapy with weekly paclitaxel and carboplatin.
- She tolerated the chemo well, with an excellent clinical response.
- Developed peripheral neuropathy and fatigue, which resolved after a 15% dose reduction.
- Some alkylating agents can cause recurrent coronary spasm that occasionally leads to depressed contractility.
- This otherwise asymptomatic patient has had non-exertional self-resolving central chest heaviness lasting a few minutes, which could represent vasospastic angina.
- If the left main artery (LMA) stenosis were more significant, she could develop heart failure, which she has not.
- High-risk percutaneous coronary intervention to the right coronary and LMA could be considered if she develops cardiovascular complications.

## CASE DESCRIPTION AND OUTCOMES:

- An asymptomatic, hypertensive 71-year-old female with dyslipidemia had a pelvic screening ultrasound, due to her sister's BRCA-negative ovarian cancer, which revealed bilateral solid ovarian masses.
- The patient had a laparoscopic total abdominal hysterectomy with bilateral salpingo-oophorectomy (TAH-BSO), omentectomy, and diaphragmatic stripping of stage III high-grade serous adenocarcinoma of the ovaries (pT3b NX).
- There were residual diaphragmatic nodules (largest deposit 1 cm).
- She was found post-operatively to have severe CAD, with three-vessel disease, elevated troponin, and inducible ischemia.
- She was started on carboplatin and paclitaxel chemotherapy.



## REFERENCES:

Dermitzakis, Emmanouil V., et al. "The impact of paclitaxel and carboplatin chemotherapy on the autonomous nervous system of patients with ovarian cancer." *BMC neurology* 16.1 (2016): 190.

Bursac, D. S., et al. "Cardiotoxic effects of gemcitabine/cisplatin vs paclitaxel/carboplatin first-line chemotherapy in patients with advanced non-small cell lung cancer." *Annals of Oncology* 27.suppl\_6 (2016).

## DISCLOSURES:

None