

CAIR Case of the Month

Case Courtesy Drs. T. Maraj and
C. Dey

University of Toronto

Clinical History

- 66 year old female with known granulosa cell tumour and hepatic metastases
- Ovarian granulosa cell tumour diagnosed in 1996 (age 47) with hysterectomy and bilateral salpingo-oophorectomy performed
- Initially followed by observation until evidence of multifocal recurrence

Past Medical History

- 1996 - Diagnosed with ovarian granulosa cell tumour with TAH BSO followed by observation
- 2007 - Developed multifocal recurrence with repeat laparotomy and low-anterior resection
- 2008 - Revision surgery
- 2009 - Progressive disease in the liver with right hepatectomy and cholecystectomy
- 2012 – Progression noted and commenced on Megace, followed by Arimidex then Lupron with some response noted
- 2014 – Progression again noted and changed to Tamoxifen
- 2015 - Tamoxifen and pelvic radiotherapy used, consultation for chemo-embolization

Clinical History

- Liver disease represented dominant tumour burden
- Patient case discussed in hepatobiliary multi-disciplinary rounds with no other chemotherapy options available
 - Recommendation made for embolization
- Patient did not want chemotherapeutic agent
 - Decision made to proceed with bland trans-arterial embolization (TAE)
- Only symptom was neuropathy from diltiazem
 - Patient was otherwise active and in good condition

2006 – Pre-hepatic resection



Single hypodense metastatic deposit in the right lobe of the liver

2015 Pre-embolization

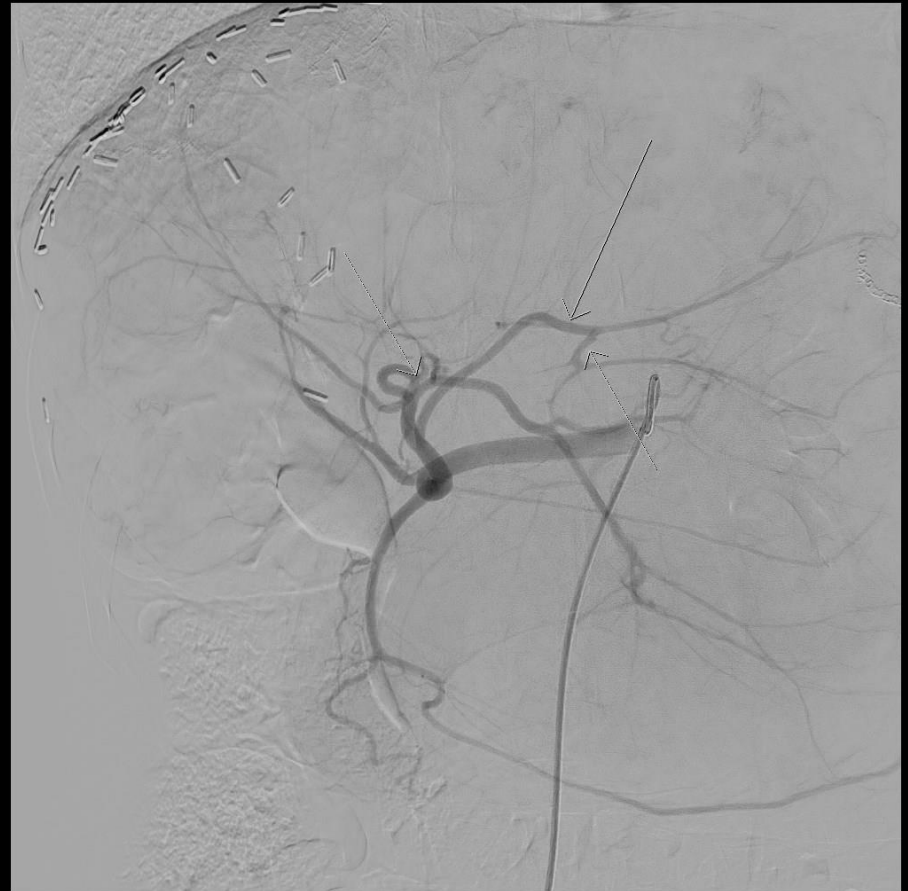


- Prior right hepatectomy
- Within the left lobe, multiple partially enhancing metastatic lesions seen throughout the remaining segments

TAE – 7 Sessions

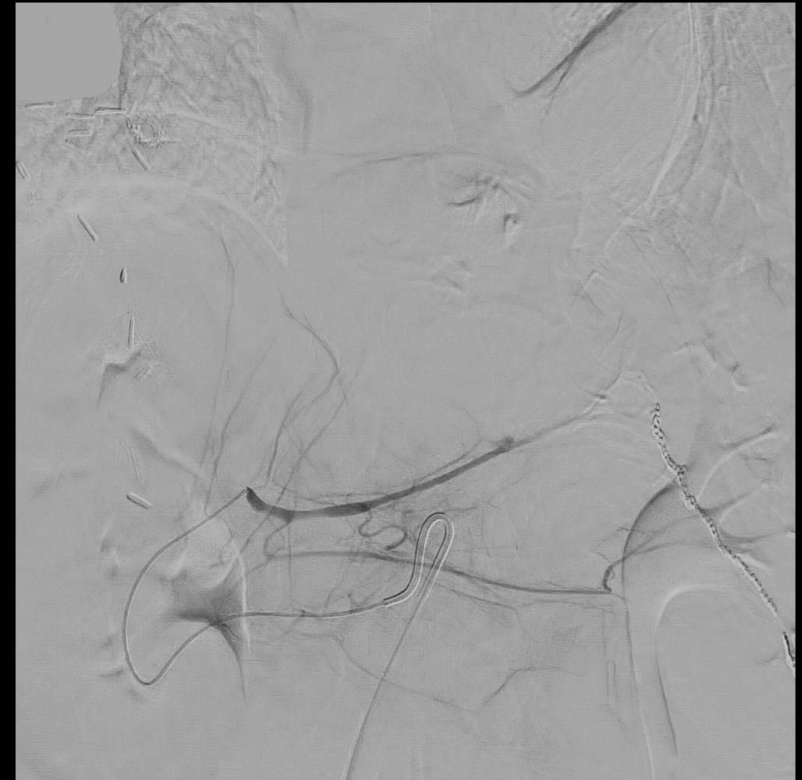
- Selective celiac arteriograms performed with 5 Fr SOS2 catheter
- 2.8 Fr microcatheter for further superselective imaging
- Embolization performed
 - common trunk to main segment 3 and 4 arteries
 - main segment 2 artery
 - segment 2 branch artery
- 100-300 micron and 40-120 micron Embospheres used
- Pruning of very distal vessels usually achieved on completion angiogram

TAE - 1st Session June 2015



Celiac angiogram showing common trunk providing main segment 3/4 arteries, main segment 2 artery and segment 2 branch artery

TAE - 1st Session June 2015

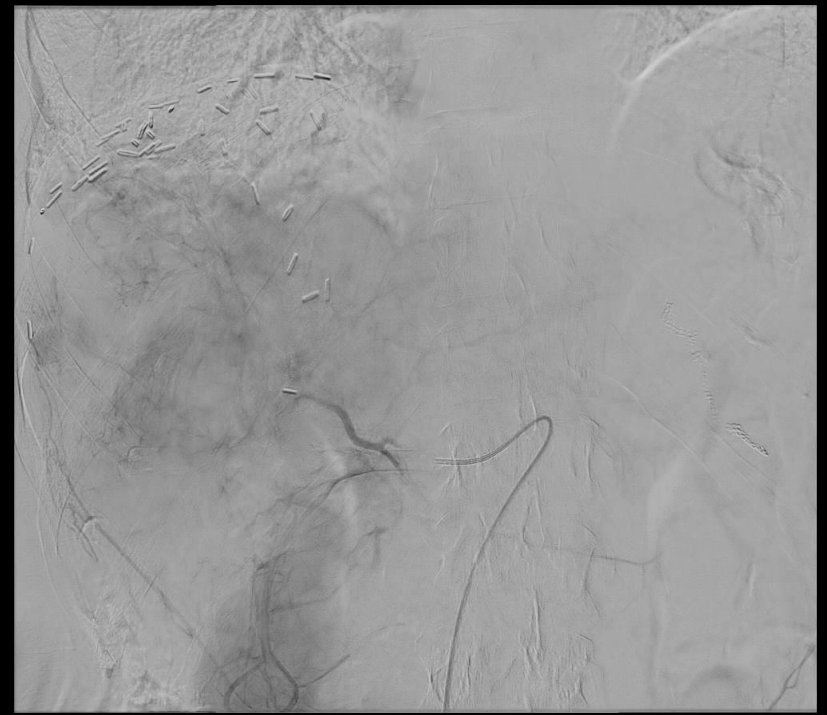


Selective angiograms of main segment 4 and main segment 2 arteries

TAE

- June 2015 – Session 1
- July 2015 – Session 2
- March 2017 – Session 3
- April 2017 – Session 4
- August 2018 – Session 5
- October 2018 – Session 6
- November 2018 – Session 7

TAE - 7th Session November 2018



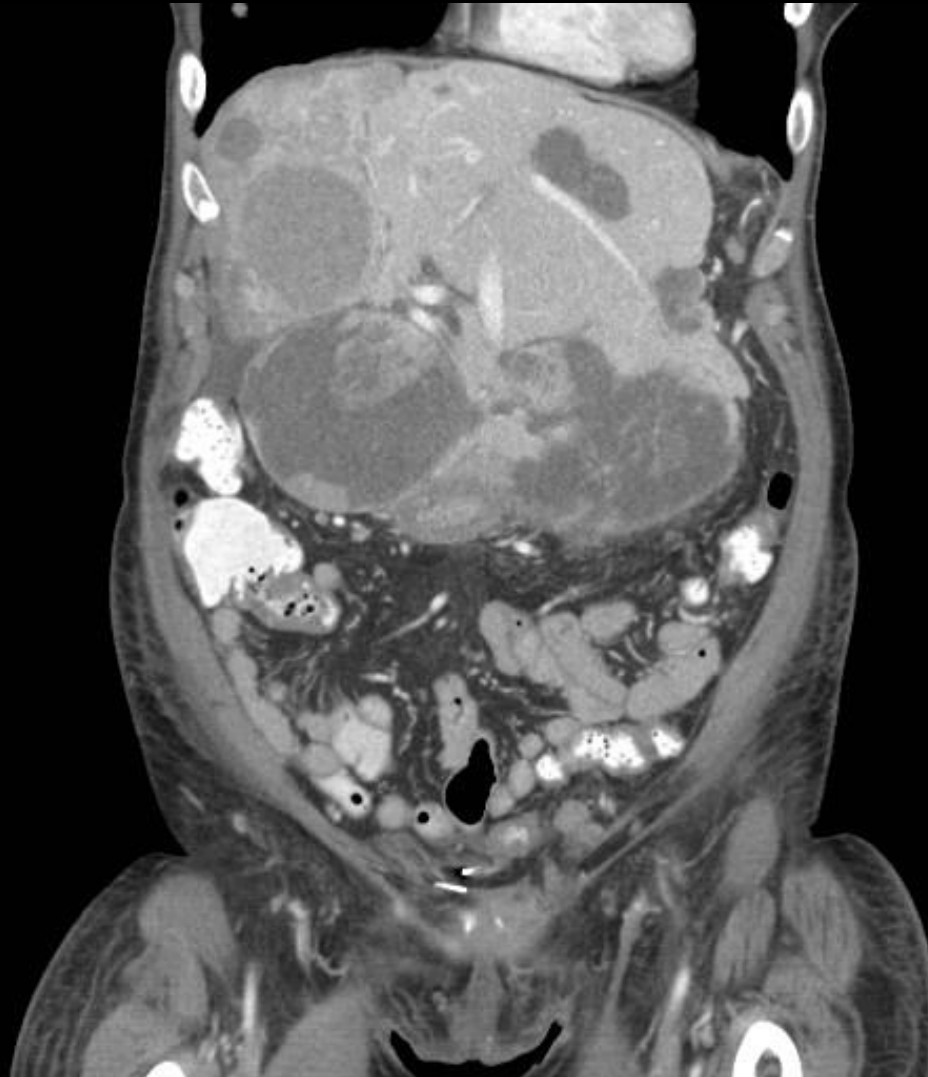
- Common trunk supplying segments 3/4 seen with main segment 2 branch
 - Multifocal tumour blush noted throughout segment 4

Post 7th Session



Multiple metastatic lesions have increased in size with some non-enhancing and some partially enhancing lesions suggesting some response

Post 7th session



Patient Course

- Good quality of life during procedures
- Developed leg pain and lower back pain around 7th session and found to have vertebral body metastases
- Decision made for palliative therapy in December 2018
- Died in January 2019

Literature Review

- Few papers available on use of chemo-embolization for ovarian tumour hepatic metastases
- No prior studies available on bland embolization of ovarian tumour hepatic metastases
- Trans-arterial chemo-embolization (TACE) effective for palliative treatment of liver metastases from ovarian cancer with survival times of 14 months (median) and 18.5 months (mean)¹

Literature Review

- Case report for TACE for ovarian malignant melanoma with liver metastases showing survival of 80 months²
- Further studies of TAE or TACE for ovarian tumour hepatic metastases should be considered in future

Conclusions

- Some control of granulosa cell hepatic metastases possible with bland embolization
- Overall survival of 42 months with TAE when no further systemic chemotherapeutic options were available
- Rare presentation, however further studies with TAE and TACE are warranted

References

1. Vogl TJ et al. Initial experience with repetitive transarterial chemoembolization (TACE) as a third line treatment of ovarian cancer metastasis to the liver: indications, outcomes and role in patient's management. *Gynecolo Oncol.* 2012 Feb
2. Yuki T, et al. Transarterial chemoembolization for liver metastasis of ovarian malignant melanoma resulting in long-term survival. *Japanese (translated)*. *Gan To Kagaku Ryoho.* 2016 Nov