**Introduction/Background**

Growing teratoma syndrome is a rare clinical entity presenting as enlarging benign tumours during or after chemotherapy for malignant germ cell tumours. It has an incidence of 12% in ovarian NSGCT. Complete surgical resection of the tumour is the current gold standard in treating this condition, and prognosis is excellent once the tumour is completely removed. However, it is when the mass is deemed inoperable that the management of this condition becomes a challenge.

**Methodology**

This is a case of a 33-year-old, nulligravida who presented with abdominal enlargement and ascites. Transvaginal ultrasound revealed 13.0 x 12.0 cm solid mass with cystic components. The patient underwent exploratory laparotomy, peritoneal fluid cytology, total abdominal hysterectomy, bilateral salpingo-oophorectomy, bilateral pelvic lymph node dissection, and infracolic omentectomy, with intraoperative staging of IIIC. Final histopathologic report revealed a benign mature cystic teratoma of the right ovary. Despite this result, the patient had recurrence of the ascites. Hence, underwent paracentesis and chemotherapy with Bleomycin, Etoposide, and Cisplatin. After the second cycle, the patient developed multiple masses involving the right adnexa, right hepatic lobe, right hepatoportal, epigastric, and pelvic areas. Ultrasound-guided biopsy of the liver mass was done revealing a teratomatous process. The patient was referred to a hepatopancreatobiliary surgeon, however, due to the extensive liver involvement, surgery was deferred and arterial embolization of the masses was done instead.

**Result(s)**

Arterial embolization of the masses was done resulting in resolution of the abdominal enlargement and bloatedness, and change in the consistency of the mass becoming more cystic than solid. However, repeat CT scan was done which revealing a further increase in size of the masses.

**Conclusion**

We are presented with a case of GTS, originating from a benign mature teratoma, which is non-resectable due to extensive liver involvement. Though with benign nature, GTS poses a great challenge in its management. Being a rare clinical entity, there is limited experience with the treatment options available, especially in inoperable cases. Arterial embolization has not been widely used in documented cases of GTS. This case explores the possible role of arterial embolization in the management of non-resectable GTS.