and they were unchanged. We took a biopsy of the other ovary. Histopathological findings confirmed that it was a malignant teratoma. One month after the operation, the patient developed abdominal pain and an ultrasound showed a cyst on the other ovary. We performed a second laparotomy and the whole abdomen was with meta changes. We did hysterectomy, omentectomy, and oophorectomy. She received six cycles of chemotherapy but unfortunately, the patient died after 7 months of primary treatment.

**Conclusion** Although malignant teratoma is very rare caution should always be exercised in treating these tumors and the dilemma remains as to which is the best option in primary treatment as it is most often young women who want to preserve their fertility. Can elevated alpha-fetoprotein levels help us predict the potential malignant transformation of ovarian cystic teratomas?

**2022-RA-1022-ESGO**

**IMPLEMENTATION OF MACHINE LEARNING IN A CARE PATHWAY FOR ADVANCED EPITHELIAL OVARIAN CANCER: A NATIONAL CANCER INSTITUTE EXPERIENCE**

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**Introduction/Background** Nowadays, the knowledge of quality indicators may enable physicians to adapt the patients’ care to current standards and recommendations. Thus, the implementation of machine learning in a care pathway can be observed as an asset. The objective of this work was to describe the development of a care pathway for advanced epithelial ovarian cancer (AEOC) using artificial intelligence, in a National Comprehensive Cancer Institute.

**Methodology** A multidisciplinary team defined the key steps of the AEOC pathway. Valuable indicators were defined based upon national and international guidelines. The software was educated to extract items of interest from the patient’s electronic medical record. Automatic alerts are controlled by the medical referrers. Data are automatically updated daily.

**Results** Gradually, 17 AEOC keys steps and 21 indicators were selected. From January 2018 to April 2022, 403 patients were identified in the Turquoise pathway. The median delays were: from first call to first medical appointment, 6 days; from first appointment to laparoscopic diagnostic procedure, 12 days; from first appointment to start of primary chemotherapy if indicated: 33 days. Our center is a European Society of Gynaecological Oncology (ESGO) accredited center for ovarian cancer: the ESGO indicators for AEOC were easily available, and confirmed the intermediate center status with 72 to 117 cytoreductive surgeries per year. Adverse events were prospectively recorded, with a 8% rate of surgical complications after cytoreductive surgery. Twelve to 18% of patients were included in clinical trials. The SARS-CoV-2 pandemic impact was clearly identified with an increased number of neoadjuvant chemotherapy.

**Conclusion** The use of artificial intelligence has enabled the construction of a critical care pathway with real time feedback that’s helps to target the best quality of medical and surgical care. In the future, appointments will be streamlined to enhance the patients’ treatment course.

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**ROLE OF RADIOTHERAPY IN PLATINUM SENSITIVE Oligometastatic Recurrent Ovarian Cancer: A Valid Alternative to Delay Systemic Treatment**

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**Introduction/Background** The rate of HGSC after an isolated STIC diagnosis was 7.1% with a cumulative incidence of 10.5% (21.6%) after five (ten) years. HGSC was only observed in BRCA1 carriers. The role of adjuvant therapy and routine surveillance remains unclear, however, intense surveillance up to ten years is necessary.