DEVELOPING INFRASTRUCTURE FOR MOLECULAR PROFILING FOR ALL IN OVARIAN CANCER (DEMO)

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Introduction/Background The lack of patient engagement and biopsy quality could both reduce the number of successful molecular tests performed after the diagnosis of ovarian cancer. DEMO is a multi-centre quality improvement study that aims to improve the uptake and success rates of tumoural and germline molecular testing in ovarian cancer. The two lead sites have vastly different patient demographics. One in 7 (15%) women diagnosed in Birmingham are non-Caucasian with high number of patients requiring interpreters for their consultations, whilst patients diagnosed in Cambridge are mostly Caucasian and fluent in English.

Methodology The three components of DEMO include:
1) the establishment of a patient advisory group to co-produce a multimedia, multilingual patient information package to support informed decision making
2) the use of improvement methodology to analyse existing diagnostic pathways
3) the development of a multidisciplinary consensus guideline to improve the current biopsy pathways for molecular profiling.

Results Our initial retrospective audit (n=75; January-August 2021) demonstrated high tumoural (BRCA or Homologous Repair Deficiency) testing failure rates of 25% (3/12) and 35% (11/31) of samples from image-guided biopsies and post-repair deficiency (group 3 – group 2 – group 1) testing failure rates of 25% (3/12) and 35% (11/31) of samples from image-guided biopsies and post-repair deficiency (group 3 – group 2 – group 1) testing failure rates of 25% (3/12) and 35% (11/31) of samples from image-guided biopsies and post-repair deficiency (group 3 – group 2 – group 1)

Conclusion Supporting informed decision making for all and establish auditable biopsy pathways are crucial for the implementation of molecular profiling to improve ovarian cancer care.

 THERE IS NO BENEFIT FOR PREOPERATIVE HYPERHYDRATION BEFORE CYTOREDUCTIVE SURGERY AND HYPERTHERMIC INTRAPERITONEAL CHEMOTHERAPY (HIPEC) WITH CISPLATIN WHEN COMBINED WITH SODIUM THIOSULFATE

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Introduction/Background Cytoreductive surgery (CRS) associated with hyperthermic intraperitoneal chemotherapy (HIPEC) is an essential treatment for peritoneal carcinomatosis (PC). Cisplatin is known to cause acute renal failure (ARF) after systemic or intraperitoneal administration. After accumulation, it can lead to nephrotoxicity in one-third of intravenous prescriptions and up to 40% of ARF for the IP route, with progressive and irreversible chronic renal failure. In addition to preoperative hyperhydration, sodium thiosulfate (ST) is a well-known pharmaceutical agent and has been used in the prevention of Cisplatin-induced toxicity, particularly renal toxicity. The objective of our study was to evaluate the interest in preoperative intravenous hydration alone or in combination with ST to prevent nephrotoxicity induced during intraperitoneal Cisplatin in patients who underwent CRS with HIPEC.

Methodology Retrospective single-tertiary-center analysis of all consecutive patients treated by CRS with Cisplatin-based HIPEC between January 01, 2015, and July 30, 2020. All types of PC were included. There were three consecutive periods of study corresponding to 3 different treatments. A first group was treated with preoperative hyperhydration alone (group 1 – PHH), a second one with preoperative hyperhydration (3L/24 h of Ringer-Lactate) with the addition of ST (group 2 – PHH + ST), and a third one with ST alone (group 3 – ST).

Results The study included 320 consecutive patients. Median age was 59 years (interquartile range 49 – 68 years), with 76% women. Higher rate of complete cytoreduction (CC0) were achieved in PHH + ST and ST alone (92% and 97%, respectively, vs 77%, p < 0.001). PHH + ST and ST alone had better postoperative renal function without acute injury compared to group 1 (p<0.001).

Abstract 2022-RA-1058-ESGO Figure 1

Primary objective

To improve the proportion of eligible women diagnosed with ovarian cancer successfully tested for tumoural BRCA mutations or Homologous Recombination Deficiency (HRD) and germline BRCA mutations.

Improve information

Co-produced patient information (multilingual + multimedia)

Monitor performance

Prospective audit cycle using novel QI technique

Consensus/Guidelines

Multisite Multidisciplinary consensus + CPD opportunity