# 2022-RA-1040-ESGO NUTRITIONAL SUPPLEMENTATION WITH

## MYO-INOSITOL-D-CHIRO-INOSITOL: EFFECT ON REPRODUCTIVE SYSTEM FUNCTIONALITY IN LONG-TERM SURVIVORS OF LYMPHOMA

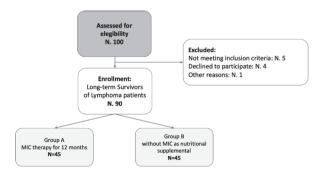
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#### 10.1136/ijgc-2022-ESGO.851

Introduction/Background The principal International scientific societies of oncology recommend that Long-term Survivors of Lymphoma join fertility programs. Therefore, we conducted a prospective observational controlled study, with the aim to assess the effects of oral supplementation with Myo-Inositol and D-Chiro-Inositol (MIC) on ovarian function parameters in Long-term Survivors of Lymphoma

Methodology Between January 2020 and January 2021, 90 female patients, long-term Survivors of Lymphoma with an average age of 34 years (range 25–44), were considered eligible and enrolled in the study (figure 1). The study was registered on ClinicalTrials.gov (ID: NCT05410314). We conducted this study on two groups: the first one (A group) underwent oral supplementation with MIC for 12 months, and the second group (B group) underwent follow-up without any nutritional supplement for 12 months. Statistical analysis: The level of statistical significance was set at  $p \le 0.05$ . Analysis was conducted with STATA/SE 15.0.

**Results** In group A a significant reduction after 12 months was observed for follicle-stimulating hormone (FSH), luteinizing hormone (LH), oligomenorrhea and a reduction to the limits of statistical significance for the progesterone (PG) (table 1).



Abstract 2022-RA-1040-ESGO Figure 1 Flow-chart for inclusion and treatment of Long-term Survivors of Lymphoma in the study

Abstract 2022-RA-1040-ESGO Table 1 Comparison of ovarian function parameters in long-term survivors of Lymphoma patients between baseline (T0) and after 12 months of oral supplementation with Myo-Inositol and D-Chiro-Inositol combined therapy (T12, Group A) abd between baseline (T0) and after 12 months of follow-up without any nutritional supplement (T12; Group B). AMH: anti Müllerian hormone; FSH: follicle-stimulating hormone; LH: luteinizing hormone; PG: progesterone; AFC: antral follicle count

Group A				Group B					
TO		T12		-	TO		T12		
Mean (SD)	CI 95%	Mean (SD)	CI 95%	P	Mean (SD)	CI 95%	Mean (SD)	CI 95%	Р
4.23 (2.38)	3.51-4.95	4.3 (2.13)	3.65-4.94	0.4465	4.45 (2.74)	3.62-5.28	4.64 (2.64)	3.85-5.44	0.3700
10.08 (7.64)	7.77-12.38	7.15 (5.43)	5.52-8.78	0.0199	9.94 (7.50)	7.68-12.19	10.44 (6.31)	8.55-12.34	0.3654
14.43 (8.22)	11.95-16.90	11.20 (6.64)	9.21-13.20	0.0219	14.8 (8.40)	12.27-17.32	15.76 (11.11)	12.42-19.10	0.3220
107.57 (45.86)	93.79-121.35	100.31 (54.89)	83.81-116.80	0.2487	109.75 (47.45)	95.49-124.01	111.83 (51.66)	96.31-127.35	0.4214
9.47 (4.32)	8.17-10.77	11.13 (5.09)	9.60-12.66	0.0501	11.18 (5.55)	9.51-12.85	10.92 (4.93)	9.44-12.40	0.4090
6.22 (2.89)	5.35-7.09	7.8 (2.86)	6.93-8.66	0.0055	7.61 (4.72)	6.18-9.03	6.75 (2.73)	5.93-7.58	0.1487
7.58 (2.64)	6.78-8.31	6.93 (2.61)	6.15-7.72	0.1240	6.57 (2.73)	5.75-7.39	7.02 (2.57)	6.25-7.79	0.2146
	Mean (SD) 4.23 (2.38) 10.08 (7.64) 14.43 (8.22) 107.57 (45.86) 9.47 (4.32) 6.22 (2.89)	Mean (SD) Cl 95%   4.23 (2.38) 3.51-4.95   10.08 (7.64) 7.77-12.38   14.43 (8.22) 11.95-16.90   107.57 (45.86) 93.79-121.35   9.47 (4.32) 8.17-10.77   6.22 (2.89) 5.35-7.09	T0 T1   Mean (SD) C1 95% Mean (SD)   4.23 (2.33) 3.51-4.95 4.3 (2.13)   10.06 (7.64) 7.77-12.38 7.15 (5.43)   14.43 (8.22) 11.95 (6.90) 11.20 (6.64)   107.57 (45.86) 93.79-121.35 100.31 (54.89)   9.47 (4.32) 8.17-10.77 11.33 (5.09)   6.22 (2.89) 5.357-09 7.8 (2.86)	TO T12   Mean (SD) C1 95%   4.23 (2.38) 3.51.4 95 4.3 (2.13) 3.65.4 94   10.08 (7.64) 7.71.123 8 7.75 (5.43) 5.65.2 87   14.43 (8.22) 11.95.46 90 11.20 (6.64) 9.21.13.20   9.77 (4.53 8) 9.57 (21.35 8) 9.57 (21.35 8) 83.11.16.20   9.47 (4.32) 8.17.10.77 11.33 (5.09) 9.60.12.66   5.22 (2.89) 6.35.70.07 7.8 (2.86) 6.93.8.66	TO TO TO TO   Mean (B) CI 95% Mean (SD) CI 95%	TO TZ P T   Mean (50) C195% Mean (50) C195% Mean (50) C195%   4/20 (23) 3/51.495 4.3 (2.13) 3/55.494 0.4655 4.45 (2.74)   0/00 (764) 77.7123 7.155.645 5.528.78 0.0919 9.67 (2.75)   14.43 (6.22) 1155.450 1.120 (6.4) 9.271.320 0.0718 4.88.640   0.977 (458) 0.757 (458) 0.757.4558 0.757.4578 0.757.4578 0.757.4578 0.757.45788 0.757.4578 </td <td>Mars (16) T T2 P Part (16) T   25/2 (2.8) 3.07 (2.8) 4.07 (2.8) 5.08 (2.8) 5.08 (2.8)&lt;</td> <td>Jane (16) TO To</td> <td>Jane (16) TO TO March (16) March (16)</td>	Mars (16) T T2 P Part (16) T   25/2 (2.8) 3.07 (2.8) 4.07 (2.8) 5.08 (2.8) 5.08 (2.8)<	Jane (16) TO	Jane (16) TO TO March (16)

**Conclusion** In our data analysis, comparing ovarian function parameters in group A women between baseline (T0) and after 12 months of oral supplementation with MIC, a significant reduction in FSH and an increase in PG and antral follicle count (AFC) of the right ovary resulted. This result could be due, at least in part, to the known MIC effect on ovulation improvement that contrasts with luteal insufficiency, typical in these patients. The limitations of our study should also be considered, such as the lack of previous similar studies, thus not allowing a direct comparison with other clinical experiences, and the low number of enrolled women. Therefore, further studies are needed to confirm our preliminary findings in a larger setting.

## 2022-RA-1046-ESGO FREQUENCY OF BOWEL ANASTOMOSIS LEAKAGE AFTER MODIFIED POSTERIOR EXENTERATION – COMPARISON OF TWO SURGICAL METHODS: CLASSIC SURGERY IN PATIENTS WITH OVARIAN CANCER AND MINIMAL INVASIVE MODIFIED 'TAILORED' TECHNIQUE IN DEEP INFILTRATING ENDOMETRIOSIS PATIENTS

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10.1136/ijgc-2022-ESGO.852

Introduction/Background Modified posterior exenteration is procedure performed either during advanced surgical treatment of ovarian cancer and advanced deep infiltrating endometriosis. One of the most severe complications of this procedure is bowel anastomosis leakage.

Methodology Total of 70 patient who underwent modified posterior exenteration (MPE) were enrolled in the study and divided into 2 groups:A: 30 patients treated with laparotomy due to ovarian cancer FIGO IIB – IIICB: 40 patients treated with modified laparoscopic, tailored technique' (ICG, sealing materials) due to deep infiltrating endometriosis (DIE) [at least 1 lesion in colon, only one segment resected]

**Results** 1) Average distance of bowel anastomosis from the 'Z' line was 90 mm in patients with ovarian cancer vs 75 mm in DIE patients. 2) Average length of resected bowel was similar in both groups. 3) Number of protective stomas was equal: 1 in each group. 4) Bowel anastomosis leakage rate was 10% cases in group A vs 2,5% in group B.

**Conclusion** 1) Healing of anastomosis differs between both groups according to different character of the diseases. 2) Possibility to save mesorectum and bowel vascularization in minimal invasive 'tailored' technique in patients with DIE doubtless has significant impact on anastomosis quality – reduces its risk. 3) ICG vascularization control, securing materials usage reduce bowel anastomosis leak risk. 4) Bowel anastomosis distance from the 'Z' line has lower impact on its quality than other analyzed features – significantly lower in patients with DIE.

#### 2022-RA-1145-ESGO COGNITIVE FUNCTION PERFORMANCE IN GYNECOLOGICAL CANCER PATIENTS ADMITTED TO THE HIGH DEPENDENCY UNIT POSTOPERATIVELY

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10.1136/ijgc-2022-ESGO.853

Introduction/Background High dependency surgical units represent a major advance in the perioperative management of patients undergoing major abdominal surgical operations, including those performed for gynecologic oncology. Cognitive impairment has been established in the setting of prolonged hospitalization in intensive care units however, remains poorly explored in the HDU setting.

Methodology We performed a prospective observational study to evaluate the impact of HDU hospitalization on cognitive function of gynecological cancer patients. Prior to inclusion in the study, we screened eligible patients for depressive disorders using the Patient Health Questionnaire-9 (PHQ-9) and for severe cognitive dysfunction with the Hopkins verbal learning test. Identification and omission of cases with severe memory disability was performed with the Short Portable Mental Status Questionnaire (SPMSQ). Evaluation of differences in the perioperative cognitive performance of patients was performed with the Quick Mild Cognitive Impairment tool (QMCI).

**Results** Overall, 40 patients were enrolled in the present study. Of those 14 patients were hospitalized in the HDU for a period of 2 days (1–4). Differences in cognitive function were subtle and did not reach statistical significance in either group. However, a subtle decrease in cognitive function was observed among patients admitted to the HDU (presurgical score 68 (64 – 71) vs postsurgical 71 (64–91), p=.202) whereas a comparable decrease was observed among patients admitted to the NICU (presurgical score 62 (55,37 – 66.37) vs postsurgical score 59.25 (53.37–77), p=.227. Of note, the difference in postoperative scores among the two groups was significant (p=.021)

Conclusion Subtle differences are observed among patients admitted to the high dependency unit even for a short followup period. This should be kept in mind by physicians which should restrict HDU hospitalization in the minimum required interval. Further studies in specific populations (octogenarian, patients admitted for prolonged duration) are needed to help optimize their cognitive performance.

## 2022-RA-1151-ESGO COGNITIVE FUNCTION PERFORMANCE IN PATIENTS UNDERGOING MAXIMAL EFFORT CYTOREDUCTION SURGERY FOR GYNECOLOGICAL CANCER MANAGEMENT

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10.1136/ijgc-2022-ESGO.854

Introduction/Background Gynecological cancers account for approximately 20% of the 5 million estimated new cancer cases yearly internationally. More than half of these cases are surgically treated with a perioperative morbidity ranging between 2 and 40%. To date, the impact of the extent of surgical operations on cognitive functions of patients remains unknown.

Methodology We performed a prospective observational study to evaluate the burden of surgical extent (based on the Mayo Clinic classification) on perioperative cognitive function of gynecological cancer patients. Prior to inclusion in the study, we screened eligible patients for depressive disorders using the Patient Health Questionnaire-9 (PHQ-9). Identification of potential cases with severe cognitive dysfunction was assessed with the Hopkins verbal learning test. Identification and omission of cases with severe memory disability was performed with the Short Portable Mental Status Questionnaire (SPMSQ). Evaluation of differences in the perioperative cognitive performance of patients was performed with the Quick Mild Cognitive Impairment tool (QMCI).

**Results** Overall, 40 patients were enrolled in the study. Of those 12 patients had an intermediate complexity score, whereas the remaining had a low complexity score. None of those had severe depression (median PHQ-9 3 (2–4)) or severe cognitive dysfunction (median Hopkins scale 17 (14–19)). The SPMSQ battery tool revealed 3 cases with mild memory disability. Differences in the perioperative cognitive performance was significant between pre- and post-operative scores in all patients. The result was more evident in patients with intermediate complexity scores (presurgical score 69.5 (64.87–76.64) vs postsurgical 22 (19.75–59.25), p=.007) compared to patients with low complexity score (presurgical score 61 (56–65) vs postsurgical score 55.5 (46.5–63.5).

**Conclusion** Maximal surgical cytoreduction significantly affects the cognitive function of gynecological cancer patients. To date, relevant evidence in gynecologic oncology is scarce and efforts must be made to improve the quality of cognitive performance during the perioperative period.