EVALUATION OF CHEMOTHERAPY SERVICE AT THE ALEXANDRIA UNIVERSITY CLINICAL ONCOLOGY DEPARTMENT IN VIEW OF INTERNATIONAL RECOMMENDATIONS

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Introduction

Chemotherapy is considered the most extensively used modality in the current management of adult oncology patients. In some cases it is given in combination with other treatment modalities such as radiotherapy, surgery, hormonal and target therapy.

Aim of the work

The purpose of this study was to assess the aspects of chemotherapy service in the clinical oncology department Alexandria university hospital, to come up with recommendations and a chemotherapy checklist to facilitate the chemotherapy process.

Patients and methods

This was a prospective observational study conducted on 300 adult patients seen from August 2019 to February 2020.The patients' demographic data, clinical details and chemotherapy data were collected and analyzed using SPSS version 2.

Results

The median age was 54 years old with a range of 17-83 years. 71.3% of the patients were overweight& obese. Breast cancer accounted for 24.3% of the cases, ovarian(6.7%) and colon/lung cancer (5.7%) each. Adriamycin/cyclophosphamide followed by Taxol was the most commonly used regimen (17.3%), followed by Paclitaxel/Carboplatin (13%) and Gemcitabine/Cisplatin (7%). Majority of the patients were on outpatient chemotherapy (77%) and (23%) were inpatients. 82% of patients were on intravenous chemotherapy and 6.3% on oral chemotherapy. 100% of the patients gave verbal consent before the start of treatment.21% of the patients had dose modifications during their treatment cycle due to hematological toxicity (17.3%), neurological toxicity (3%), renal impairment (1%), hepatic and gastrointestinal toxicities (0.3%) There was a significant correlation between hematological toxicity and treatment duration (p=0.002).Moreover, there was also a significant correlation between neurological toxicities and the duration of treatment (p=0.016). Notably, there was a significant correlation between BMI & breast cancer (P<0.001) , ovarian cancer (P< 0.004) , nasopharyngeal cancer (P=0.001), esophageal cancer (P< 0.006) , HCC (P< 0.048) and neuroendocrine tumors (P< 0.009).

Results

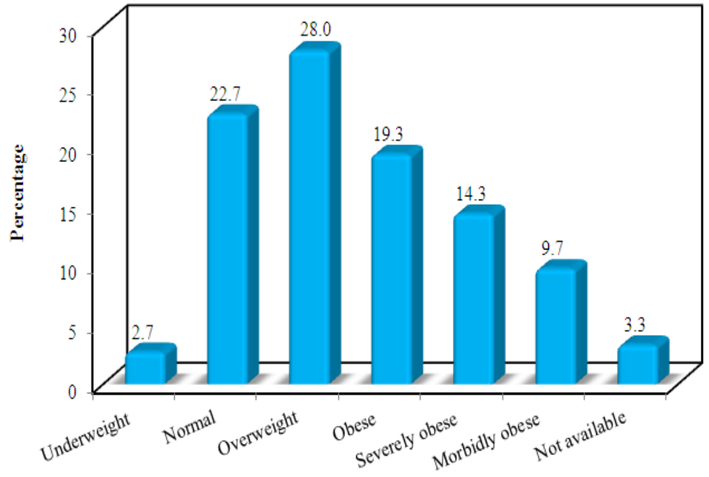

Figure : Distribution of the studied cases according to BMI (kg/m^2)

Table 1: Distribution of the studied patients based on the type of chemotherapy consent. (n=300)

Chemotherapy consent		
Verbal	300	100.0
Written	0	0.0
Total	**300**	**100.0**

Table 2: Correlation between treatment duration (months) and acute side effects.

	No.	Treatment duration (months)			Test of Sig.	p
		Min. – Max.	Mean ± SD.	Median		
Gastrointestinal						
Yes	**15**	0.70 – 5.63	3.66 ± 1.67	4.03	U=1562.0	0.491
No	**237**	0.0 – 88.70	4.11 ± 5.98	3.63		
Neurological						
No	**225**	0.0 – 88.70	3.95 ± 6.10	3.50	U= 1798.50*	0.016*
Yes	**23**	0.93 – 14.27	4.76 ± 2.88	4.37		
Hematological						
Yes	**76**	0.77 – 14.80	4.27 ± 2.40	3.97	U= 4959.0*	0.002*
No	**172**	0.00 – 88.70	3.91 ± 6.87	3.23		
Anemia						
Mild (grade 1+2)	**11**	2.57 – 4.67	3.70 ± 0.67	3.80	U= 83.0	0.154
Severe (grade 3+4	**22**	1.17 – 5.37	3.09 ± 1.29	3.08		
Thrombocytopenia						
Mild (grade 1+2)	**13**	1.40 – 8.77	4.45 ± 1.81	4.17	U= 15.50	0.245
Severe (grade 3+4	**4**	2.47 – 4.37	3.63 ± 0.82	3.83		
Neutropenia						
Mild (grade 1+2)	**16**	1.17 – 6.0	3.88 ± 1.50	4.0	U= 140.00	0.056
Severe (grade 3+4	**27**	0.77 – 14.80	5.66 ± 3.29	5.0		

Conclusions

The chemotherapy service aspects observed were as per the international recommendations. However, there is need to enhance nutritional counselling for chemotherapy patients. In addition, written consent forms should be considered for each patient before the start of chemotherapy.