

FREQUENCY OF CHEMOTHERAPY INDUCED AMENORRHEA IN WOMEN WITH COLORECTAL CANCER

Tevhide Şahin (Hacettepe University Faculty of Medicine, Department of Internal Medicine, Ankara)
 Ömer Dizdar (Hacettepe University Cancer Institute, Department of Preventive Oncology, Ankara)
 Nuriye Özdemir (Ankara Numune Education and Research Hospital, Department of Medical Oncology, Ankara)
 Nurullah Zengin (Ankara Numune Education and Research Hospital, Department of Medical Oncology, Ankara)
 Öztürk Ateş (Ankara Abdurrahman Yurtaslan Oncology Hospital, Department of Medical Oncology, Ankara)
 Ömür Berna Öksüzöğlü (Ankara Abdurrahman Yurtaslan Oncology Hospital, Department of Medical Oncology, Ankara)
 Mehmet Ali Nahit Şendur (Yıldırım Beyazıt University Faculty of Medicine, Department of Medical Oncology, Ankara)
 Burak Bilgin (Yıldırım Beyazıt University Faculty of Medicine, Department of Medical Oncology, Ankara)
 Utku Burak Bozbulut (Hacettepe University Cancer Institute, Department of Medical Oncology, Ankara)
 Metin Demir (Hacettepe University Cancer Institute, Department of Medical Oncology, Ankara)
 Saadetin Kılıçkap (Hacettepe University Cancer Institute, Department of Preventive Oncology, Ankara)
 Şuayib Yalçın (Hacettepe University Cancer Institute, Department of Medical Oncology, Ankara)

Introduction - Purpose : Adjuvant chemotherapy is the standard treatment for stage III and high-risk stage II colorectal cancer (CRC). We aimed to investigate the frequency of chemotherapy-induced amenorrhea (CIA) in premenopausal women diagnosed with CRC and treated with adjuvant chemotherapy.?

Methods - Tools : Pre-menopausal women younger than 50 years and diagnosed with non-metastatic CRC were included from 4 oncology clinics in Ankara, Turkey. Data were obtained directly from patients at follow-up visits or patient files. Analyses were made separately for those older and younger than 40 years. Patients who received pelvic radiotherapy were excluded.

Findings : Data of 60 women were eligible. Forty-nine patients had received adjuvant chemotherapy. Median age was 40 years. Twenty seven were <40 years and 33 were >40 years. Patient characteristics are showed in Table 1. Chemotherapy induced persistent amenorrhea 1 year after completion of chemotherapy was observed in 0/23 women (0%) younger than 40 years and in 10/26 women (38%) >40 years ($p=0.004$). Median age of women who experienced persistent amenorrhea was 48.2 (min 43 – max 50). After median follow up of 8 years, 4 of 11 (36%) untreated patients and 22 of 49 (45%) treated patients became post-menopausal ($p=0.74$).

Discussion : Although the patient number is small, we did not observe any case of CIA in women younger than 40 years and treated with fluoropyrimidine or oxaliplatin-based regimens. Older age seems to be the major risk factor for persistent CIA after chemotherapy in patients with CRC.

	<40 years (n=27)	>40 years (n=33)	p
Age (median)	34	45	<0,001
stage I II III	3 16 5	3 18 8	0,84
Smoking	7	7	
BMI >25	10	17	0,26
Chemotherapy regimen None			
Floropyrimidine oxaliplatin-based	4 11 12	7 11 15	0,69

Keywords: chemotherapy induced amenorrhea