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ASSESSMENT OF TOXIC COMPLICATIONS OF CHRONOCHEMIOTHERAPY IN THE TREATMENT OF RECTUM CANCER

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Resume:
The Riovariatm Andijan branch analyzed the 70 patients who were on account" D "with the diagnosis of" colon cancer " following chemotherapy and chronochemotherapy. In 80-90% of patients receiving chemotherapy, different manifestations of side effects are observed. The observation of these toxic complications is explained by the effect of the cytostatic drug on typical cells.

Keywords: rectum cancer, chemotherapy, chronochemotherapy, toxic complications.

Rectum cancer accounts for 5% of all poor-quality Tumor Diseases (6 seats), and 40-45% (3 seats) of poor-quality Tumor Diseases of the digestive system [13]. Each year, 80-85% of more than 600,000 colorectal cancers worldwide are identified in the lower stage (III-IV) [3] and more than half of them die in the same year [15]. While the disease is most common in economically developed countries of the World (USA, Canada, Japan), it is most rare in India, China, Vietnam [13]. This disease is 10 times more common in economically developed countries than in underdeveloped countries [8].

There are methods of chemotherapy, radiotherapy, surgical treatment, combined and complex treatment of rectum cancer, the effectiveness of which is estimated based on how long the treated patient lives.

In the conservative treatment of colorectal cancer, the therapeutic result is always manifested along with a number of side effects and complications, and these conditions are explained by the cytostatic effect of the drug on the oranism not only on a malignant tumor cell (atypical), but also on a normal cell (typical) cytostatic effect. In patients who receive nearly 80-90% chemotherapy, different types of side effects are observed [13].

In recent years, chronopharmacology has been studied in all areas of Medicine [5], but there has been little data in the literature that chemotherapy is performed in the treatment of oncological diseases based on daily rhythms. Chronochemotherapy is a section of chronotibbiot aimed at increasing the effectiveness of chemiopreparate and reducing its side effects, using cytostatic drugs based on the daily rhythm (circadian) [1, 2]. Chronochemotherapy increases the cytostatic effectiveness of chemiopreparations and reduces the side effects, complications of the Drug [10, 11].

Chemotherapy, based on biorhythms in oncology, has been found to prolong the survival of patients by 2 times, increase the effectiveness of treatment by 1.5-2 times, and reduce poisoning by the body[6, 9, 16, 17].

The data presented in the literature indicate that in typical (normal) cells according to biological rhythm, the metabolism of substances actively occurs during the day, while in the evening, on the contrary, the metabolism slows down [12]. Without the cancer cell (atypical cell) obeying the law of biorhythm, the exchange of substances occurs equally actively at all times of the day, and the mitotic cycle of the atypical cell occurs precisely at night [14]. The literature reports that different antiblastic effects were obtained when the same dose of cytostatic drugs was used at different times of the day and side effects were partially reduced. This condition is explained by the fact that the mitotic cycle of the atypical cell occurs at night [7, 16].

The analysis of the above data shows how relevant the problem of rectum cancer is, the complexity of the treatment issues that are waiting for a solution.

Purpose of the work: assessment of toxic complications of cytostatic drugs used in the conservative treatment of rectum cancer based on chronopharmacology.

Material and examination methods: 70 patients treated during 2011 – 2021 with a diagnosis of "colon cancer" in Andijan regional oncology dispensaries were examined according to the "standard for the treatment and examination of malignant tumors" and received ad'yuvant, neoad'yuvant or symptomatic chemotherapy treatments.

All patients were subjected to extended general blood analysis, general urine analysis, biochemical blood analysis (bilirubin, transaminase, creatinine, mochevina, nitrogen mochevina), UTT and ECG examinations before treatment, and appropriate schemes were selected in accordance with the treatment standard of cytostatic drugs. After the end of the treatment, General blood and urine analyzes were seen repeatedly. one of the schemes of MAYO, FOLFOX, HELOX was selected for colon cancer.

Table 1. Distribution of patients by group with respect to the chemotherapy scheme and the stage of the disease.

№	Chemotherapy scheme	Group	**n**	Stage of the disease					
				II		III		IV	
				n	%	n	%	n	%
1	MAYO	I	**10**	0	0	7	70,0	3	30,0
		II	**12**	0	0	9	75,0	3	25,0
2	FOLFOX	I	**16**	1	6,3	10	62,5	5	31,2
		II	**15**	1	6,7	8	53,3	6	40,0
3	XELOX	I	**9**	1	11,1	5	55,5	3	33,4
		II	**8**	1	12,5	4	50,0	3	37,5
Total		***I***	***35***	***2***	***5,7***	***22***	***62,8***	***11***	***31,5***
		II	***35***	***2***	***5,7***	***21***	***60,0***	***12***	***34,3***
Total			**70**	**4**	**5,7**	**43**	**61,4**	**23**	**32,9**

1 group of 35 patients – with a diagnosis of "rectum cancer" in regional oncology dispensaries-were given "d" - counting and ad'yuvant, neoad'yuvant or symptomatic chemotherapy treatments in the evening (at night). Of the patients – 10 (28.6 %) were undergoing chronochemotherapy in MAYO, 16

(45.7 %) in FOLFOX and 9 (25.7 %) in HELOX scheme. Of the patients, 14 (40.0%) were female and 21 (60.0%) were male. 2 (5.7 %) of patients received treatment for Stage II, 22 (62.8 %) received treatment for Stage III and 11 (31.5 %) received treatment for Stage IV of the disease (Table 1).

2 groups of 35 patients – with a diagnosis of "rectum cancer" in regional oncology dispensaries-received "d" - counting and ad'yuvant, neoad'yuvant or symptomatic chemotherapy treatments during the day. Of the patients – 12 (34.3 %) were undergoing chronochemotherapy in MAYO, 15 (42.9 %) in FOLFOX and 8 (22.8 %) in HELOX scheme. Of the patients, 12 (34.3%) were female and 24 (65.7%) were male. 2 (5.7%) of patients received treatment for Stage II, 21 (60.0 %) received treatment for Stage III and 11 (34.3 %) received treatment for Stage IV of the disease (Table 1).

Results and their opposites.

Treatment for Group 1 patients was done using chronochemotherapy. In this case, one of the schemes of the treatment standard was selected, and the drugs were poured into the body in the evening (after dinner).

In patients of Group 2, one of the schemes of the standard of treatment was selected, and drugs were poured into the body during the day.

All patients after treatment, side effects were studied based on the general poisoning criterion assessment table established by the World Health Organization as a whole (table 2).

2 table. Side effects observed in patients receiving chemotherapy and chronochemotherapy and their degree of poisoning

№	Characters		Poisoning rate									
			0		I		II		III		IV	
			n	%	n	%	n	%	n	%	n	%
1	Anorexia	I	2	12,5	8	50,0	4	25,0	2	12,5_	0	0
		II	1	5,6	6	33,4	6	33,4	4	22,2	1	5,6
2	Nausea	I	0	0	5	27,8	9	50,0	4	22,2	0	0
		II	0	0	1	5,3	12	63,2	6	31,5	0	0
3	Vomit	I	0	0	4	57,1	2	28,6	1	14,3	0	0
		II	0	0	2	20,0	4	40,0	3	30,0	1	10,0
4	Zarda	I	3	30,0	4	40,0	2	20,0	1	10,0	0	0
		II	1	7,7	7	53,8	3	23,1	2	15,4	0	0
5	Stomatitis	I	1	20,0	3	60,0	1	20,0	0	0	0	0
		II	0	0	3	60,0	1	20,0	1	20,0	0	0
6	Taste disorders	I	5	50,0	4	40,0	1	10,0	0	0	0	0
		II	4	36,4	5	45,4	2	18,2	0	0	0	0
7	Diarrhea	I	2	50,0	1	25,0	1	25,0	0	0	0	0
		II	3	42,8	2	28,6	2	28,6	0	0	0	0

Group 1 patients experience anorexia 45.7 %, nausea 51.4 %, vomiting 20 %, dice presence 28.6 %, stomatitis 11.4 %, taste disorders 28.6%, and diarrhea 11.4%.

Group 2 patients experience anorexia at 51.4 %, nausea at 54.3 %, vomiting at 25.7 %, dice at 37.1 %, stomatitis at 14.2 %, taste disorders at 31.4%, and constipation at 14.2%.

From Table 2, it can be seen that all side effects showed a milder extent in Group 1 patients compared to Group 2 patients.

Conclusion

The result of scientific research showed that in patients undergoing chronochemotherapy treatments, poisoning of the body according to traditional chemotherapy was observed 1.19 times less and to a lighter extent.

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