

1 *Abstract*

2 **Clinicopathological and Prognostic Features of Patients**
3 **with Synchronous Colorectal Tumors Diagnosed in a**
4 **Single Center**

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12 **Abstract: The objective of the study:** Colorectal cancer (CRC) is the third most common neoplasm and
13 the fourth leading cause of cancer death worldwide. About 3.5% of patients develop synchronous colorectal
14 tumors (SCRT). The aim of the study was to evaluate the clinical-pathological characteristics of TSCR, in
15 an attempt to outline the profile of these patients and to identify the parameters associated with the risk of
16 aggressive evolution of the disease. **Materials and methods:** We performed a retrospective observational
17 study on a group of patients with TSCR diagnosed on surgical resection pieces performed on patients
18 operated on in the County Clinical Emergency Hospital “Pius Brinzeu” Timișoara (CCEHPBT), in a ten-
19 year interval (2009 - 2018). Clinical data were collected from the accompanying notes of the biopsy
20 material, from the clinical observation sheets, and the pathological parameters were extracted from the
21 histopathological bulletins from the database of the Pathological Anatomy Service of the CCEHPBT.
22 **Results:** A number of 73 (4%) cases met the criteria for inclusion in the study. The age of the patients was
23 between 18 and 90 years, the average age being 64.8 years. TSCR were diagnosed more frequently in men
24 (65.76%) and predominantly located in the left colon (47.94%). In most cases, conventional
25 adenocarcinomas were identified - ADK NOS (73.97%), deeply invasive in the intestinal wall - pT3-pT4
26 (89.04%), with metastases in regional lymph nodes- pN1/pN2 (58.9%), and lympho- vascular – LV1 was
27 identified in 47.95% of cases. Lymph node metastases were more frequent in the elderly (p=0.045) and were
28 associated with pT3-pT4 (p=0.0169) and LV1 (p<0.0001), Table 1, Figure 1. **Conclusions:** Our study
29 highlights the heterogeneity of the clinical-pathological picture of TSCR patients, which increases the
30 difficulty of therapeutic management. We recommend a thorough examination and long-term clinical
31 surveillance of these cases. In addition, the identification of patients at high risk of multiple tumors as well
32 as prognostic factors is needed as complementary tools for the establishment of personalized therapy.

33 **Keywords:** colorectal cancer, synchronous tumors, clinical-pathological features

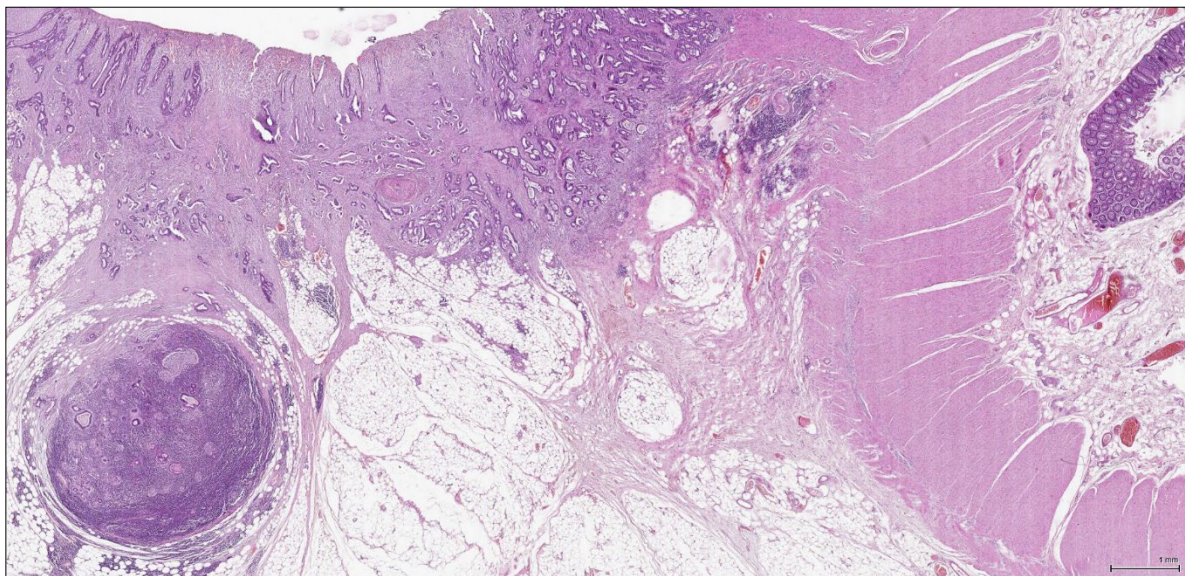
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Table 1. Distribution of cases of synchronous colorectal tumors according to the presence of metastases in the regional lymph nodes (pN) and the relationship between the pN parameter and the other clinico-pathological parameters (no.= 73), analyzed with the Fisher's exact test.

Parameters	pN0		pN1/pN2		p value
	no.	%	no.	%	
	30	42.25	43	57.75	
≤60 years	6	20.00	19	44.19	0.045
>60 years	24	80.00	24	55.81	
Females	11	36.67	14	32.56	0.8039
Males	19	63.33	29	67.44	
ADK NOS	23	76.67	31	72.09	0.7885
ADK mucinous	7	23.33	12	27.91	
pT1-pT2	6	20.00	1	2.33	0.0169
pT3-pT4	24	80.00	42	97.67	
LV0	26	86.67	12	27.91	< 0.0001
LV1	4	13.33	31	72.09	



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Figure 1. Conventional adenocarcinoma (ADK NOS), ulcerated on the surface, with involvement of subserosal adipose tissue (pT3) and a lymph node (pN1), usual hematoxylin–eosin stain, HEx6.

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