

Colorectal cancer care in the Balkan countries

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Summary

Purpose: The aim of this survey was to assess the status of colorectal cancer (CRC) care in the Balkans by contacting cancer care specialists in the Balkan Union of Oncology (BUON) member states.

Materials and methods: The authors searched the 2004 membership directories of the ASCO and ESMO and identified members from the Balkan countries. They then sent them a 3-page questionnaire via e-mail or fax.

Results: Fifty-two responses from 8 countries were received and analysed. The response rate varied from 25%

(Turkey) to 3% (Bulgaria). No Bosnian (n=13), Croatian (n=16) and Albanian (n=1) participated. The results showed that, despite variations on the state of development among Balkan countries, there were some striking similarities and also some similar difficulties that CRC specialists are facing in their individual countries.

Conclusion: Combined and coordinated efforts at solving some of these common problems may help CRC patients receive better and higher quality care.

Key words: balkan countries, cancer care, colorectal cancer

Introduction

CRC is the second most common malignancy in Europe, representing about half of all digestive tract malignancies. Approximately 30% of all patients with CRC have metastatic disease at diagnosis, and 50% of early-stage patients will eventually develop metastatic disease. The 5-year survival rate for patients with metastatic disease is approximately 3%.

The treatment of patients with CRC has changed dramatically over recent years worldwide as well as in the Balkan countries.

Since the end of the last century, oxaliplatin, irinotecan, oral fluoropyrimidines etc. have been introduced into clinical practice. New active drugs that allow first-, second- and third-line therapeutic approaches have dramatically influenced the natural history of CRC. At present, the most important question in managing a patient with CRC is not whether "to treat or not to treat with chemotherapy", but to choose the best chemotherapy schedule and sequence in each case.

However, the cost of cancer care is high. The explosion of new therapies and new sophisticated diagnostics in cancer management is going to continue and the cost will remain high. In 2003 the cost of cancer drugs globally was estimated to 21 billion US dollars. The questions we are facing today are: 1. Will the cost of drugs bring national health systems to their knees? 2. What is the optimal care for our patients?

We conducted a survey among the CRC caregiving members of the Balkan countries with an aim to answer some of these questions.

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Materials and methods

We searched the 2004 ASCO and ESMO membership directories to identify members from seven Balkan countries. We then sent an e-mail or fax to them explaining the purpose of our survey and requested their collaboration by filling in a special questionnaire (Table 1). The number of physicians that were identified in these countries and who had valid e-mail addresses are shown in the first column of Table 2.

Some of the e-mail addresses were not valid; valid e-mail addresses are shown in column two. Those who responded are shown in column three. All members who did not have a valid e-mail address and had a listed fax number were tried to be reached via fax but only 4 additional colleagues were reached this way.

Results

All of the responders were medical oncologists except one physician from Serbia who identified himself as a hematologist-oncologist. Over 75% of the responders were working at a university hospital (Table 3).

One of our questions was whether medical oncology is an officially recognized specialty/subspecialty. Eighty percent of the responders said that it is; but of note was that 2/3 of the physicians from Serbia responded that medical oncology is not an officially recognized specialty/subspecialty. In addition, the only responder from Bulgaria reported that medical oncology is not officially recognized in Bulgaria.

Another question was the length of medical oncology training. This question may not accurately be documented because the numbers show a wide variation even in each individual country, which is outlined in Table 4. Probably some of these numbers mean total years of training after graduation from medical school.

We then tried to find facts about membership in the two international organizations ESMO and ASCO. Probably due to the fact that we identified names and addresses through membership directories, every single responder was ESMO member and almost half of them were ASCO members. However, less than 25% of the responders were BUON members. Individual membership by country is shown in Table 5.

Then we sought to determine the number of medical oncologists in each Balkan country.

These numbers alone may not adequately explain the availability of medical oncologists. For instance Turkey with population of 70 million has roughly the

same number of medical oncologists as Serbia which has a population of around 7 million. The average number and the range from the responders' answers are shown in Table 6.

We also asked what other specialists treat cancer patients in the Balkans. Eighty percent of the responders reported that pneumonologists are applying chemotherapy, followed by radiation oncologists, gynecologists and urologists in descending order, showing a similar attitude in all of the Balkan countries (Table 7).

We also asked how frequently medical oncologists attend oncology-related meetings and found that the great majority of them attend such meetings once every few months (Table 8). We then inquired specifically about the ESMO and ASCO meetings. ESMO, as expected, was attended far more often than ASCO because of the geographic proximity; however, the majority of the members were also attending ASCO meetings once every 3-4 years.

Another question asked was which medical oncology-related journals are subscribed to and read. *Journal of Clinical Oncology* and *Annals of Oncology* were both very popular with almost 100% readership. *Cancer* was the only other journal that was frequently mentioned with a readership near 35%.

Most of the responders did not think ESMO is supplying any useful support in their countries for medical oncology-related activities.

Answers related to the question whether CRC subspecialists exist in the Balkan countries are shown in Table 9. Overall it appears that there are CRC subspecialists, but their number is probably quite small.

In replying the question whether there are any national guidelines or recommendations for the treatment of CRC the answers received from each country differed from each other substantially, as shown in Table 10.

Responses as to whether there is a national cancer registry are shown in Table 11. A second question asked was whether there is a national screening program for CRC and overwhelmingly responders said no.

In responding the question what is the standard or most prescribed adjuvant chemotherapy for CRC, the answer was either bolus 5 fluorouracil plus folinic acid (FUFA) or infusional DeGramont regimen. However, FUFA was employed far more frequently than DeGramont, but that also differed among countries. Greece employed DeGramont almost as frequent as FUFA, while other countries were inclined more toward FUFA than DeGramont.

We also inquired about the standard or most prescribed first-line chemotherapy for advanced CRC. Irinotecan-based regimens were used more fre-

Table 1. The questionnaire used in this survey

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1. What is your profession?
 Oncology Hematology Surgery Radiation Oncology
 2. Place of work?
 Univers. Hospital Private Government Other
 3. Is Medical Oncology an officially recognized specialty/subspecialty in your country?
 Yes No
 4. How many years is the medical oncology training?
 1 2 3 4 More
 5. Are you a member of
 ESMO BUON ASCO Local Oncology Group
 6. How many medical oncologists are there in your country?
 Number....
 7. What other specialists are treating cancer patients with chemotherapy?
 Pneumonology General Surgery Radiation Oncology
 Gynecology Urology Thoracic Surgery Other (Please specify):
 8. How many medical oncology related meetings are you able to attend in a year?
 1-2 3-4 5-9 >10
 9. How many ESMO meetings were you able to attend?
 1-2 3-4 5-9 >10
 10. How many times did you attend ASCO?
 Every year Every other year Once every 3-4 years Never
 11. Which journals do you subscribe / read?
 JCO Annals of Oncology Cancer Other (please specify)
 12. Do you receive any support from ESMO?
 Yes No
 13. Are there any colorectal cancer (CRC) related subspecialists in Med. Oncology?
 Yes No
 14. Do you have National Guidelines or Recommendations for colorectal cancer?
 Yes No
 15. Do you have National Epidemiology Registry for malignancies (or CRC)?
 Yes No
 16. Do you have National screening program for CRC?
 Yes No
 17. Which one is the standard or most prescribed adjuvant chemotherapy for CRC
 FUFA DeGramont Other (Please specify)
 18. Which one is the standard or most prescribed first line chemotherapy for advanced CRC
 Folfiri Folfox Other (Please specify)
 19. Which one is the standard or most prescribed second line chemotherapy for advanced CRC
 Folfiri Folfox Other (Please specify)
 20. Are the following drugs available to all of your patients?
 Capecitabine?
 Yes No
 21. Oxaliplatin?
 Yes No
 22. Irinotecan?
 Yes No
 23. Is the cost of drugs covered by insurance for all patients?
 Yes No
 24. What percent of the patients has to contribute to drug costs by themselves
 <10% 11-25% 26-50% 51-75% >75%
 25. Are the following lab tests readily available to all of your patients
 CEA
 Yes No
 26. CA 19-9
 Yes No
 27. Is "total mesorectal excision" routinely done for rectal cancer patients?
 Yes No
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Table 2. Attempted and responded participants

Country	Total	valid e-mail	Response	No response	Unreachable
Albania	1	1	0	1	0
Bulgaria	42	28	1	27	14
FYROMacedonia	3	3	1	2	0
Greece	96	67	11	56	29
Romania	59	41	4	37	18
Serbia & Montenegro	106	73	11	62	33
Turkey	81	64	21	43	21

Table 3. Working place of responders

Country	University hospital	Private hospital	Government hospital
Bulgaria	1		1
FYROMacedonia	1		
Greece	6		5
Romania	3		1
Serbia & Montenegro	10		1
Turkey	18	2	1

Table 4. Length of medical oncology training

Country	Years of training				
	1	2	3	4	5
Bulgaria		1			
FYROMacedonia	1				
Greece			4		7
Romania					4
Serbia & Montenegro	2	4			5
Turkey		4	10	1	6

Table 5. Membership in oncological societies

Country	ESMO	Local Oncology Group	ASCO	BUON
Bulgaria	1	1		1
FYROMacedonia	1			
Greece	10	8	9	3
Romania	4	3	2	1
Serbia & Montenegro	11	5	7	6
Turkey	22	17	9	1

Table 7. Other specialists administering chemotherapy

Country	Pneumonologists	General surgeons	Radiation oncologists	Gynecologists	Urologists	Thoracic surgeons	Others
Bulgaria			1	1			
FYROMacedonia	1	1					
Greece	10	2	6	4	1		
Romania							4
Serbia & Montenegro	11	1	2	3	6	1	3
Turkey	18	10	18	19	16		1

Table 6. Number of medical oncologists

Country	Number of responders	Average number of medical oncologists	Range of medical oncologists
Bulgaria	1	45	45
FYROMacedonia	1	4	4
Greece	11	156	120-250
Romania	4	58	55-70
Serbia & Montenegro	11	100	100-100
Turkey	21	121	80-160

Table 8. Average number of meetings attended each year

Country	Meetings / year			
	1-2	3-4	5-9	>10
Bulgaria	1			
FYROMacedonia	1			
Greece		4	6	1
Romania		4		
Serbia & Montenegro	3	5	2	1
Turkey	6	7	6	2

Table 9. Existence of colorectal cancer specialists

Country	Yes	No
Bulgaria		1
FYROMacedonia	1	
Greece	3	8
Romania	1	3
Serbia & Montenegro	5	6
Turkey	7	14

Table 10. Existence of national guidelines or recommendations for treating colorectal cancer

Country	Yes	No
Bulgaria	1	
FYROMacedonia		1
Greece		11
Romania	1	3
Serbia & Montenegro	11	
Turkey	10	11

quently than oxaliplatin-based regimens. In Serbia and Romania other regimens, probably FUFA, were used more frequently than irinotecan or oxaliplatin-based regimens. When asked what is the most prescribed second-line chemotherapy for advanced CRC, oxaliplatin-based regimens came first. Serbian colleagues used either irinotecan- or oxaliplatin-based regimens as second-line chemotherapy.

We also sought to discover whether capecitabine is available in the Balkan countries. Seventy percent of the responders said it is available and 30% said “no”. However, essentially in all countries there seemed to be a confusion as to whether it is available or not and even in each and every country there was a difference of opinion whether it is available or not (Table 12). The same Table also shows the availability of oxaliplatin and irinotecan in the Balkan countries.

In asking whether there is drug reimbursement for all patients, we found that about 60% of patients have coverage, but the answers also varied from country to country. The percent of the drug costs covered by the patients themselves was most commonly less than 10%.

Next, we asked whether tumor markers are available in the Balkan countries; both CEA and CA 19-9 were widely available.

The final question concerned whether total mesorectal excision (TME) is a routine procedure in the Balkan countries. Approximately 60% of the respond-

Table 11. Existence of National Cancer Registry

Country	Yes	No
Bulgaria	1	
FYROMacedonia	1	
Greece	2	8
Romania	3	1
Serbia & Montenegro	4	7
Turkey	15	6

Table 12. Availability of the following drugs

Country	Capecitabine		Oxaliplatin		Irinotecan	
	Yes	No	Yes	No	Yes	No
Bulgaria	1				1	1
FYROMacedonia		1	1			1
Greece	11		11		11	
Romania	2	2			4	4
Serbia & Montenegro	3	8	4	7	4	7
Turkey	11	10	20	1	21	

ers said it is not. However, looking at the application of TME on an individual country basis, the rate of this procedure was very similar in each Balkan country (Table 13). Apparently TME is not frequently used in the Balkans at this time.

Discussion

As this survey shows, Balkan countries are experiencing problems in CRC care that may not be the same as the problems faced by countries of the Western Europe and the United States. Better identification of these problems and combined concentrated efforts toward solving them should greatly improve the care provided to cancer patients in the Balkans. We hope that this survey can serve as a starting point for initiating combined efforts by physicians and health care agencies of the Balkan countries.

For a uniform clinical practice in gastrointestinal malignancies in the Balkan countries it would be useful to establish and start the Balkan School of Oncology which is in accordance to the conclusions of the General Assembly and Board of Directors of BUON. Such an educational activity should be available especially to young doctors in training and at affordable cost. We put forward the idea to form a group of experts in gastrointestinal tumors who will be able to conduct such a type of education.

Table 13. Routine application of total mesorectal excision for all rectal cancer patients

Country	Yes	No
Bulgaria		1
FYROMacedonia		1
Greece	7	4
Romania	1	3
Serbia & Montenegro	2	9
Turkey	10	11