

## CHAPTER 20

### Survey on current treatment of colon cancer

A survey was conducted consisting of 21 multiple choice questions, 20 with a single option and one with an open answer. The survey was sent via email and social networks of the Sociedad Argentina de Coloproctología,

Revista Argentina de Coloproctología, Asociación Argentina de Cirugía and different communication and dissemination channels through social networks.

#### Survey

1. In your surgical practice, you perform:

- a) General surgery
- b) General surgery and coloproctology
- c) Only coloproctology

Answers:

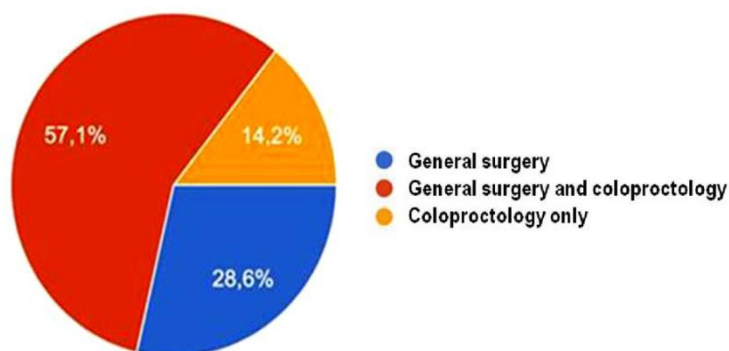


Figure 20.1

2. Are you a specialist in coloproctology?

- a) Yes
- b) No

Answers:

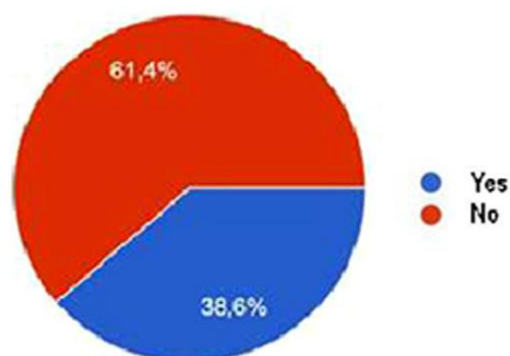


Figure 20.2

3. How do you manage colon cancer in your institution?

- a) Multidisciplinary team or committee
- b) Surgeon approach + oncologist

Answers:

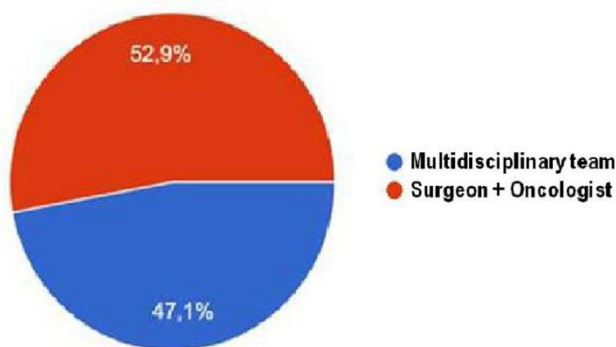


Figure 20.3

4. Is endoscopic treatment of early colon cancer (malignant polyp-T1) performed by surgeons at your institution?

- a) Yes
- b) No

Answers:

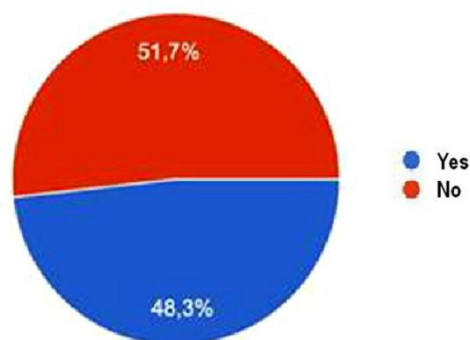


Figure 20.4

5. In early colon cancer, what is the treatment of choice in your department?

- a) Endoscopic treatment + tattooing and eventual surgery according to the histopathology.
- b) Surgery

Answers

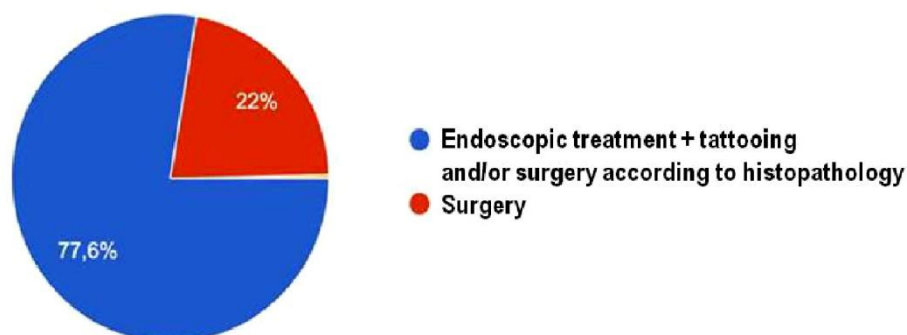


Figure 20.5

6. What is your approach to adjuvant therapy for stage II colon cancer?

- a) Surgery is sufficient
- b) Add adjuvant therapy
- c) It depends on histological factors, genetic stability, status of DNA repair genes

Answers  
:

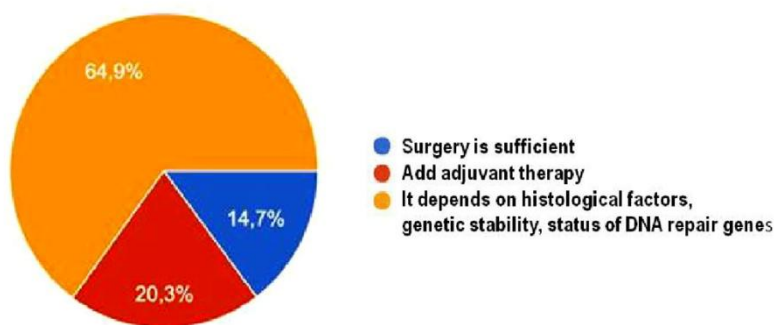


Figure 20.6

7. In right colon cancer, you perform a colectomy with total excision of the mesocolon:

- a) Routinely
- b) Selectively
- c) Occasionally
- d) Never

Answers:

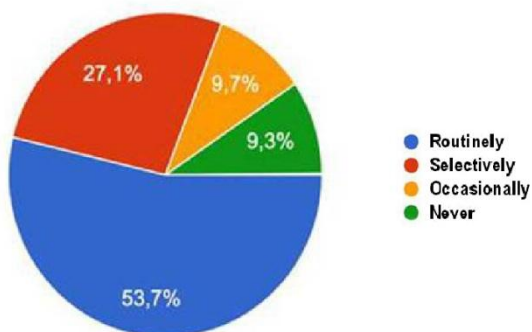


Figure 20.7

8. In locally advanced right colon cancer, you routinely perform a colectomy with:

- a) D1 lymphadenectomy
- b) D2 lymphadenectomy
- c) D3 lymphadenectomy

Answers:

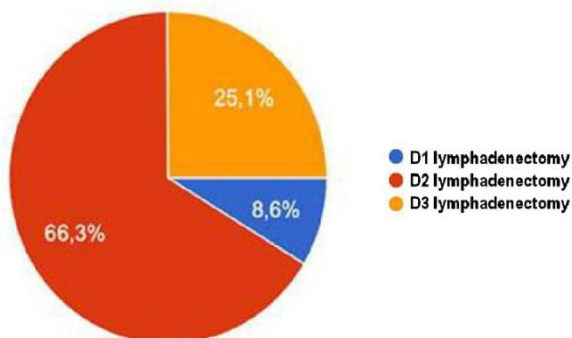


Figure 20.8

9. For the treatment of transverse colon cancer without involvement of the colonic flexures, you decide to perform:
- a) Segmental colectomy
  - b) Extended colectomy (right or left depending on the location)

Answers:

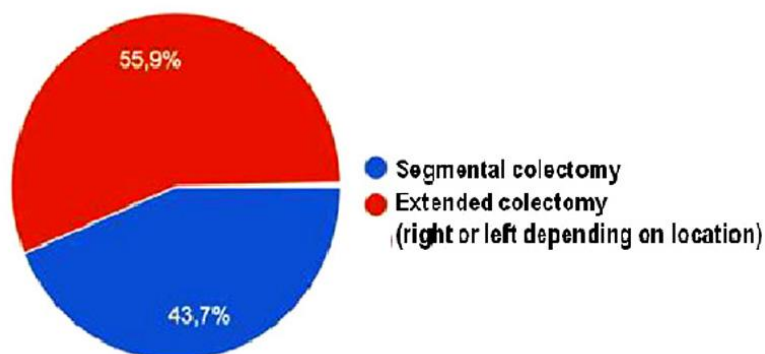


Figure 20.9

10. For the treatment of splenic flexure cancer, you indicate:
- a) Segmental colectomy
  - b) Extended colectomy (extended right colectomy, extended left colectomy, subtotal colectomy)

Answers:

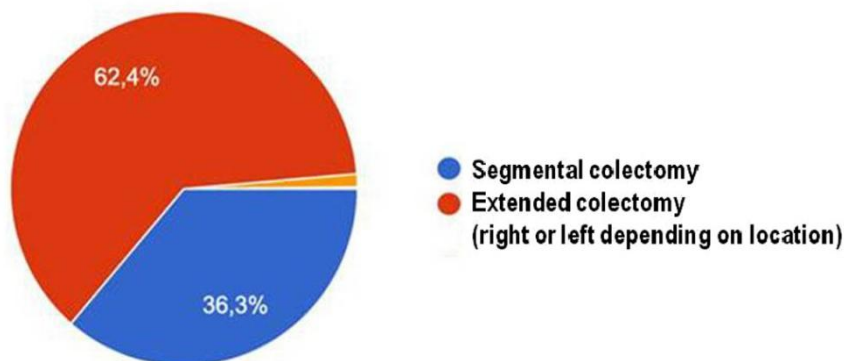


Figure 20.10

11. For elective treatment of colon cancer, you usually perform:
- a) Open surgery
  - b) Laparoscopic surgery
  - c) Robotic surgery

Answers:

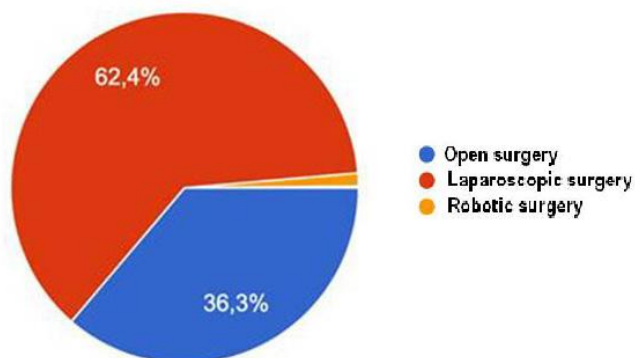


Figure 20.11

12. Do you think that robotic surgery has or will have a role in the elective treatment of colon cancer in our setting?

- a) Yes
- b) No

Answers:

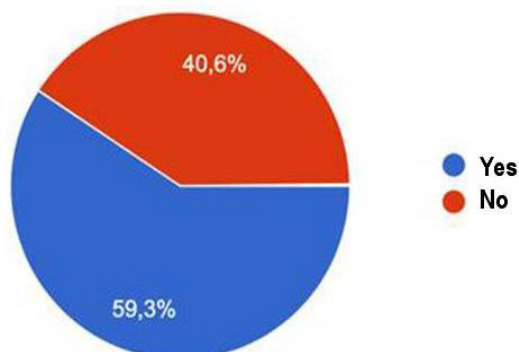


Figure 20.12

13. When do you indicate neoadjuvant therapy in colon cancer?

- a) T3-T4 Nx
- b) Tx N+
- c) M+ (Systemic treatment)
- d) Never

Answers:

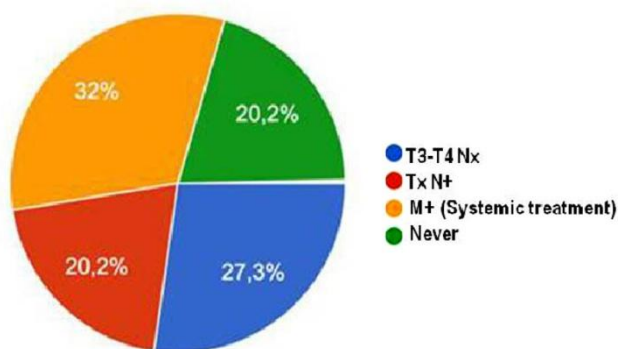


Figure 20.13

14. Do you or your multidisciplinary team use liquid biopsy in daily practice?

- a) Yes
- b) No

Answers:

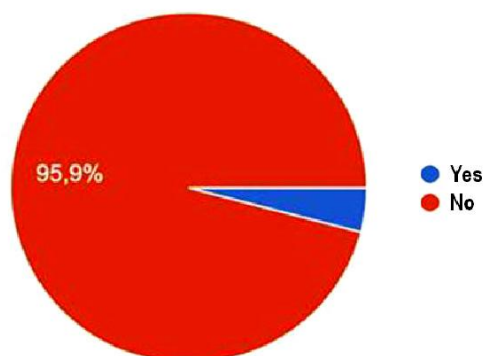


Figure 20.14

15. Do you test for microsatellite or chromosomal instability in your patients?

- a) Yes
- b) No

Answers:

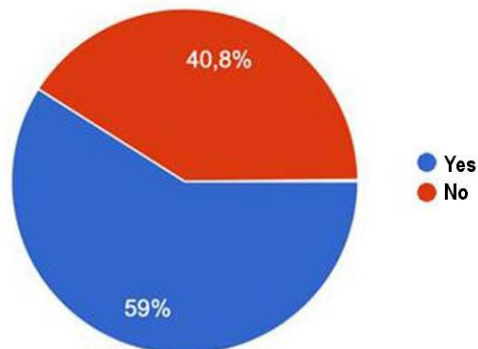


Figure 20.15

16. For the treatment of colon cancer in an emergency, you usually indicate:

- a) Open surgery
- b) Laparoscopic surgery

Answers:

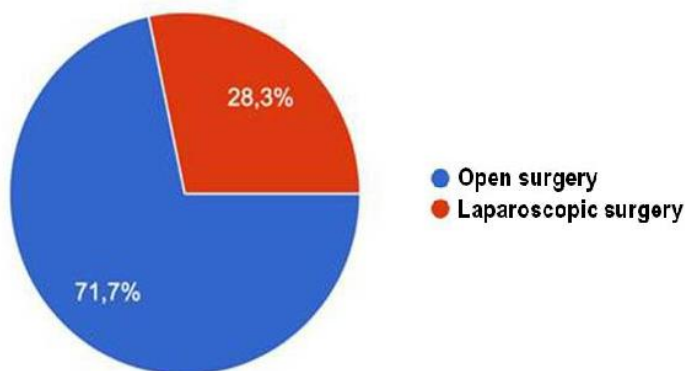


Figure 20.16

17. In occlusive cancer of the left colon, you usually opt for:

- a) Endoscopic/radiological stent
- b) Ostomy
- c) Extended colectomy, with or without anastomosis
- d) Hartmann's procedure

Answers:

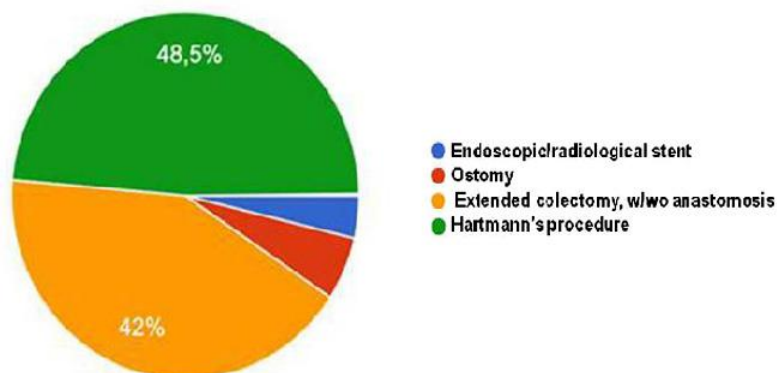


Figure 20.17

18. For occlusive cancer of the right colon, you usually opt for:

- a) Ileostomy

- b) Colectomy with anastomosis
- c) Colectomy + ileostomy

Answers:

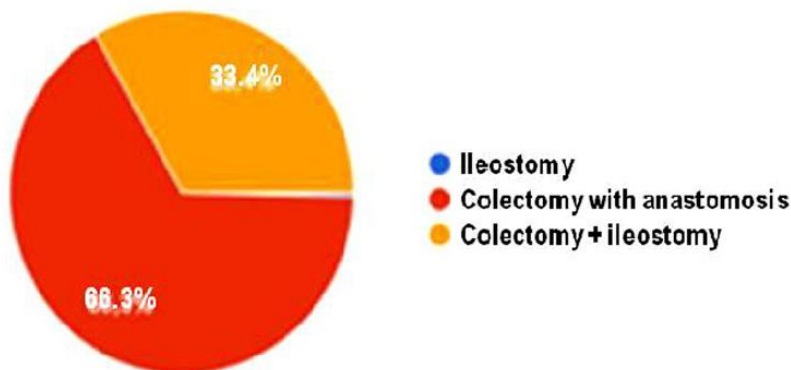


Figure 20.18

19. In a patient with resectable or potentially resectable synchronous liver metastasis, you:
- a) Treat both the primary tumor and the metastases
  - b) Refer to a hepatobiliary surgeon
  - c) Refer to another center of greater complexity
  - d) Refer to an oncologist

Answers:

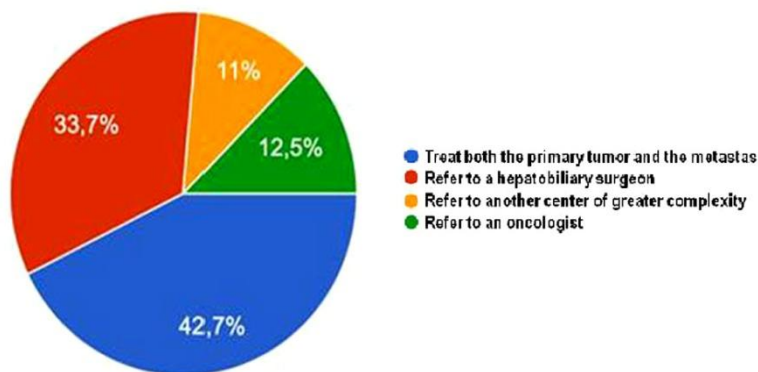
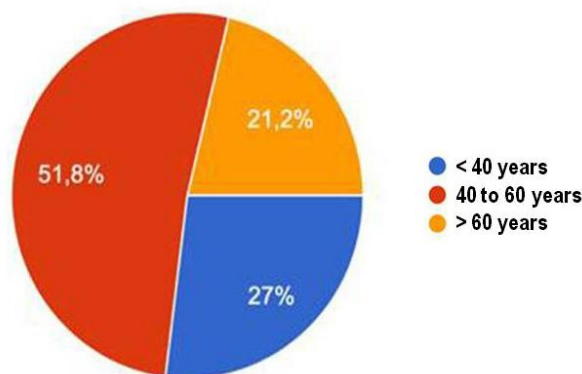


Figure 20.19

20. Your age is:
- a) < 40 years
  - b) 40 to 60 years
  - c) > 60 years



Answers:

Figure 20.20

21. What is the province of Argentina/country where you practice surgery?

Answers:

**Argentina 513**

- Buenos Aires 169
- CABA 103
- Catamarca 2
- Chaco 10
- Chubut 2
- Córdoba 34
- Corrientes 8
- Entre Rios 16
- Formosa 4
- Jujuy 10
- La Pampa 4
- La Rioja 1
- Mendoza 14
- Misiones 4
- Neuquén 7
- Rio Negro 12
- Salta 8
- San Juan 16
- San Luis 7
- Santa Cruz 3

- Santa Fe 42
- Santiago del Estero 4
- Tierra del Fuego 2
- Tucumán 30

**Rest of Latin America 77**

- Uruguay 28
- Paraguay 11
- Chile 9
- Ecuador 6
- Venezuela 5
- Mexico 4
- Panama 2
- Brazil 2
- Bolivia 2
- Guatemala 1
- Peru 2
- Colombia 1
- El Salvador 1
- Nicaragua 1
- Dominican Republic 1
- Costa Rica 1



## Survey analysis

Five-hundred ninety responses were received. The questions were answered by surgeons dedicated only to coloproctology (14.2%), only to surgery (28.6%) or to both specialties (57.1%) (Fig. 20.1). Two hundred twenty-eight (38.6%) respondents said they were specialists in coloproctology (Fig. 20.2).

It is relevant that 52.9% manage patients with colon cancer individually with the oncologist, without having a multidisciplinary team or Tumor Committee, as recommended (Fig. 20.3). A similar proportion (51.7%), do not personally manage the malignant polyp endoscopically, but refer it to an endoscopist or treat it surgically (Fig. 20.4). Regarding the management of early colon cancer, 77.6% of respondents perform endoscopic treatment with marking and only 22% decide on the initial surgical approach (Fig. 20.5).

For the treatment of stage II, 64.9% consider risk factors when deciding whether to add adjuvant therapy to surgical treatment. However, 20.3% always indicate it and 14.7% never do so and only perform surgical treatment. (Fig. 20.6).

In right colectomy, 53.7% routinely perform total mesocolon excision, 27.1% do so selectively, and 9.3% never do so. (Fig. 20.7).

For the treatment of lymph node invasion in locally advanced right-sided colon cancer, 66.3% add a D2 lymphadenectomy to the right colectomy and 25.1% a D3 lymphadenectomy. However, the remaining 8.6% perform a D1 lymphadenectomy. (Fig. 20.8).

For transverse colon cancer without flexure involvement, 55.9% of respondents indicate extended colectomy including the flexures, depending on the location. The remaining 43.7% perform segmental colectomy (Fig. 20.9). For the treatment of splenic flexure cancer, 62.2% indicate extended colectomy and 37.8% indicate segmental colectomy. (Fig. 20.10).

Elective treatment for colon cancer is routinely performed laparoscopically in 62.4% of respondents, while 36.3% use the conventional route. Only 1.2% (7 surgeons) use robotics from the start. (Fig. 20.11). However, 62.4% think that robotic surgery will play a relevant role in our environment, while 36.3% are skeptical about its applicability in colorectal surgery. (Fig. 20.12).

The indications for neoadjuvant therapy are varied and all are used in similar proportions. Thus, 32% indicate it for metastasis, 27.3% for T3 and T4 Nx tumors, 20.2% for TxN+, and another 20% say they never use neoadjuvant therapy and operate without prior treatment in any of these circumstances. (Fig. 20.13).

Only 4.1% responded that they use liquid biopsy in their daily practice for the oncological follow-up of their patients (Fig. 20.14) and 59% answered that they do not evaluate chromosomal or microsatellite stability, while 40% determine it systematically. (Fig. 20.15).

For the emergency treatment of colon cancer, 71.7% indicate open surgery and 28.3% indicate initial laparoscopy. (Fig. 20.16).

In occlusive left colon cancer, 48.5% of the surgeons surveyed recommended a Hartmann's procedure, 42% an extended colectomy with or without anastomosis, and 5.6% only a colostomy. Only 3.7% suggested the placement of an stent. This means that more than half of the surgeons surveyed resolve a left colon obstruction with a colostomy. (Fig. 20.17). If the obstruction is in the right colon, 66.3% opt for a resection with primary anastomosis and 33.4% without anastomosis. (Fig. 20.18).

In the setting of a synchronous, resectable or potentially resectable liver metastasis from a colon tumor, 42.7% approach the case surgically simultaneously, 33.7% refer or consult a liver surgeon, 12.5% refer to an oncologist, and 11% refer to a more complex center. (Fig. 20.19)

Regarding the age group of the surveyed surgeons, 51.8% are between 40 and 60 years old, 27% are under 40 years old and 21.2% are over 60 years old (Fig. 20.20). Eighty-seven percent come from Argentina, the majority from the Province of Buenos Aires and CABA, followed by Santa Fe, Córdoba and Tucumán and the rest of the Argentine provinces, which were fully represented. Thirteen percent come from different Latin American countries, mostly from Uruguay, followed by Paraguay and Chile and to a lesser extent from other countries in the region.