

Is older age associated with delayed adjuvant chemotherapy in colon cancer? An epidemiological study in "Région Centre", France

SIOG
2015
P031



Capsec J¹, Lefebvre C¹, Chupé F¹, Heitzmann P¹, Raveneau C¹, Dardaine-Giraud V², Sauger C², Lagasse JP³, Kraft K⁴, Linassier C¹, Dorval E²

¹OncoCentre, Réseau de cancérologie de la région Centre, Tours, France; ²Antenne Oncogériatrie de la région Centre, Tours, France; ³CHR Orléans, Orléans, France; ⁴CH Blois, Blois, France

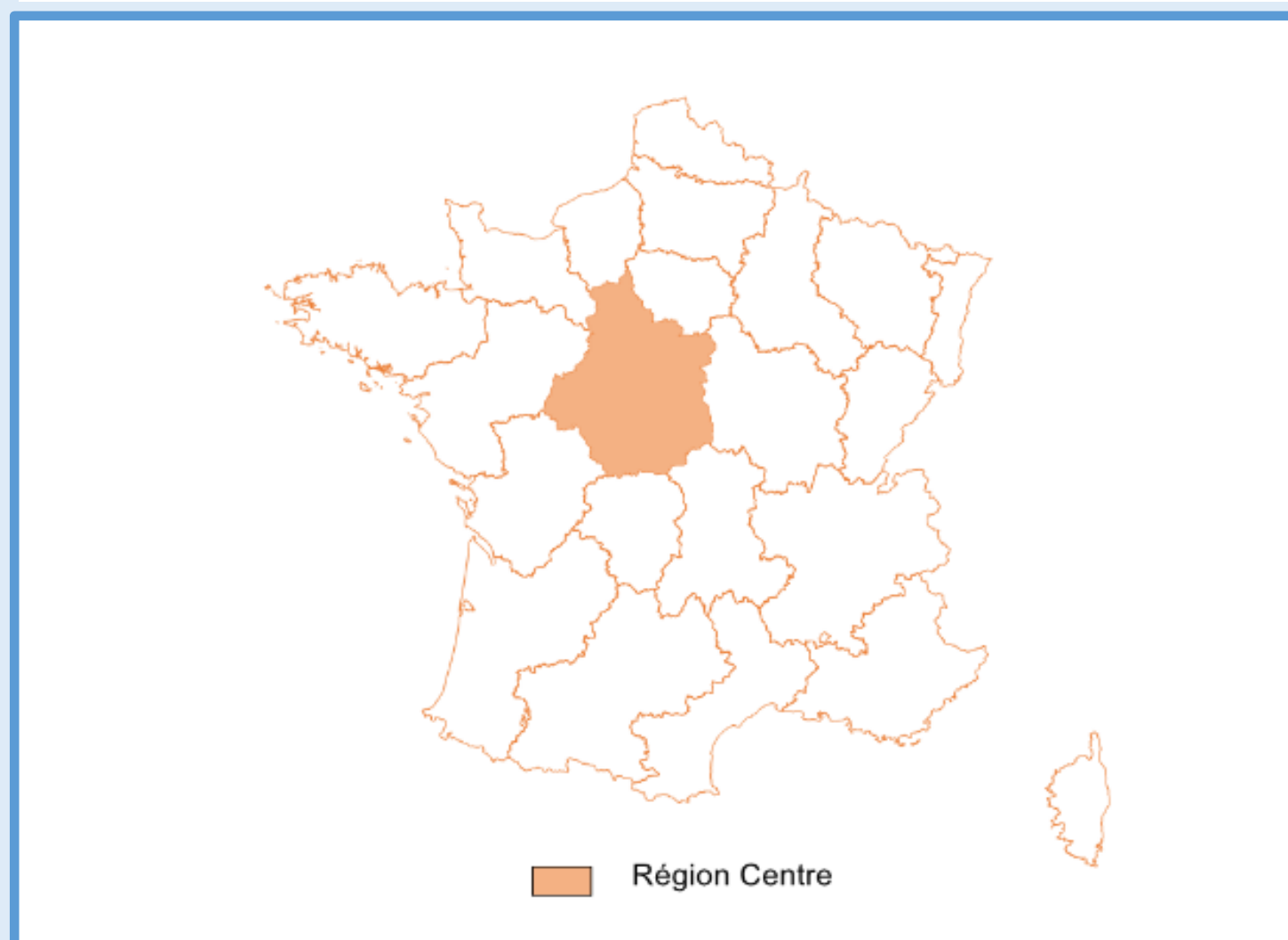
BACKGROUND

- Colon cancer (CC): 2nd cause of mortality by cancer in France
- Negative prognostic impact of delayed time to adjuvant chemotherapy (AC) in CC, beyond the 42th postoperative day
- Programs in several countries aim to reduce these delays
- Little is known about non-organizational associated factors

OBJECTIVE

Investigate and analyze the role of age and other non-organizational factors influencing delay between colectomy and initiation of AC in CC

Figure 1: « Région Centre » location in France.



METHODS

Retrospective observational epidemiological study

Cases selected:

- From regional hospital discharge database

Study population:

- Included: all adults patients operated on for CC stages 2 or 3 in « Région Centre » in 2013
- Exclusion criteria: patients with rectal cancer or past history of CC

Data collected from medical records:

- Time to AC after surgery
- Likely non-organizational associated factors:
 - Age, gender, familial and employment situation,
 - Circumstances of diagnosis including emergency surgery, postoperative morbidities and type of colectomy

Analysis:

- Univariable and multivariable analysis performed using linear regression generalized model (LGM)

RESULTS

408 colectomy cases for CC stages 2 et 3 included:

- 182 received AC (45 %) of whom 60% after 6 weeks or more and 29% after 8 weeks or more.

Table 1: characteristics and time between colectomy and AC, in population of CC stages II and III

Characteristics		Population with AC (n=182)	Population without AC (n=222)	p
Age, years	mean (SD)	67.6 (10.5)	77.9 (10.6)	<0.0001
Age, years (stage III only)	mean (SD)	69.0 (9.9)	82.4 (9.0)	<0.0001
Time to AC, days	mean (extr.)	52.9 (20 - 214)	-	
	median (Q1 - Q3)	48.5 (38 - 60.5)	-	
Time to AC exceeding	42 days (%)	60	-	
	56 days (%)	29	-	
	84 days (%)	6	-	

RESULTS

Figure 2: distribution of time to AC in weeks

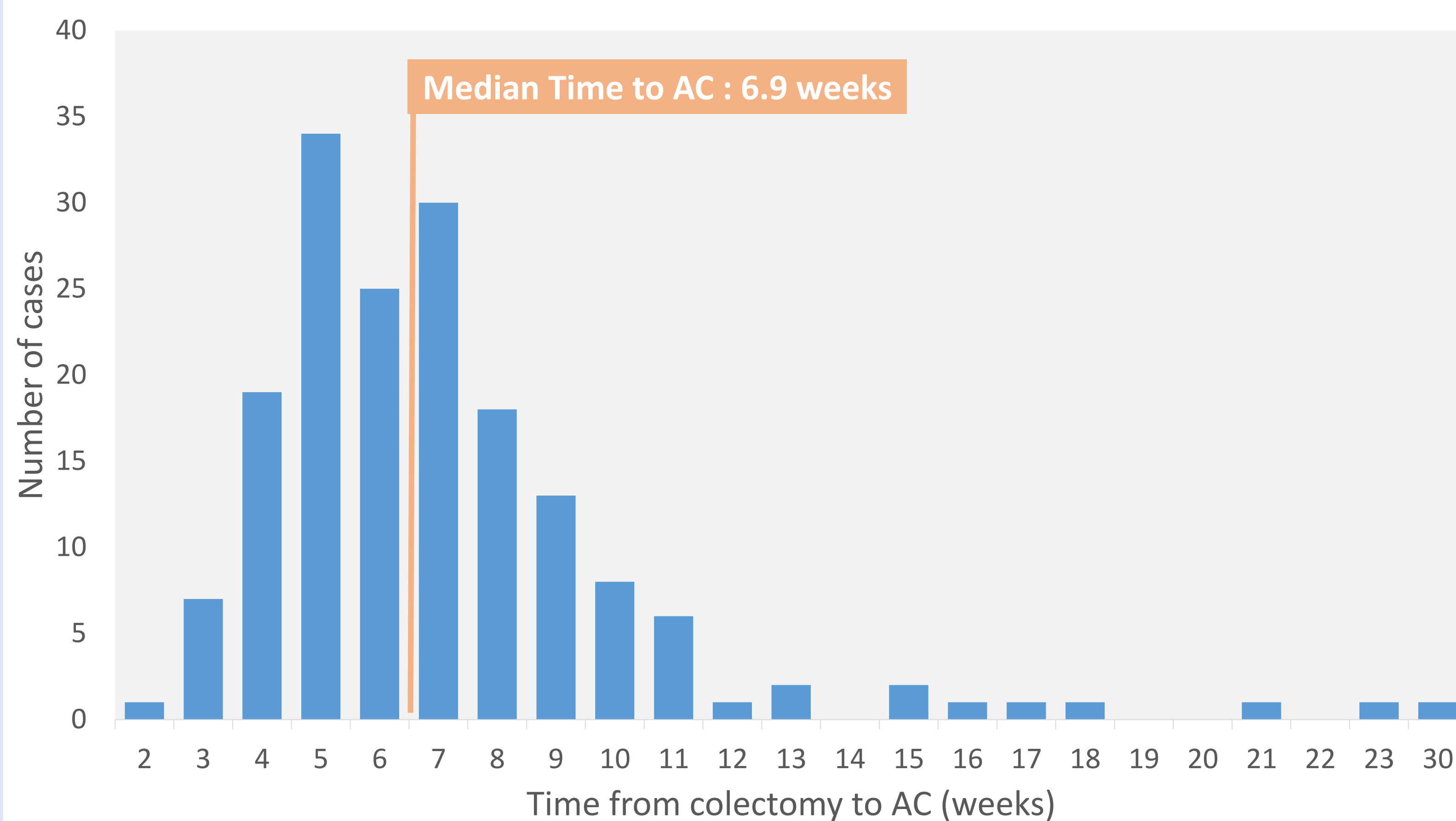


Table 2: multivariable analysis of time from colectomy to adjuvant chemotherapy (n=126) *Adjusted on regional departments

Variables	Modalities	Regression coefficient	p
	Intercept	28.7	0.009
Gender	Male	Réf.	
	Female	-3.7	0.16
Age (years)	<50	Réf.	
	50-74	0.6	0.9
	>=75	2.7	0.65
Living in couple	Yes	Réf.	
	No	8.3	0.012
T stage	T2	Réf.	
	T0 / T1 / T in situ	19.8	0.02
	T3	15.6	0.01
	T4	13.0	0.04
Colectomy type	Transverse	Réf.	
	Right	2.0	0.76
	Left	-0.4	0.95
	Total	-0.7	0.94
Cancer detection mode	Clinical signs	Réf.	
	Emergency colectomy	8.7	0.03
	Organized screening	6.7	0.1
Postoperative morbidities	Others	-4.0	0.4
	No	Réf.	
	Yes	7.2	0.056

CONCLUSIONS

- Delays between colectomy and adjuvant chemotherapy are consistent with those observed in French National study
- 60% of the patients received adjuvant chemotherapy beyond 42 days (6 weeks)
- Age is not associated with an increased delay but rather a factor of omission of adjuvant chemotherapy¹⁻²
- 3 (2 significant) non organizational factors associated with an increased delay (coherent with other studies)³⁻⁵ :
 - Emergency colectomy (+ 8.7 days; p < 0.05)
 - Not living in couple (+ 8.3 jours; p < 0.05)
 - Postoperative morbidity (+ 7.2 jours; p = 0.056)
- These factors might limit the impact of strategies aimed to act on organizational factors

References :

1. Hendren S, et al. Dis Colon Rectum. 2010 Dec;53(12):1587-93
2. Van der Geest LG, et al. Colorectal Dis. 2013;15(10):e582-91
3. Hershman D, et al. Cancer. 2006 Dec 1;107(11):2581-8
4. Bayraktar UD, et al. Cancer. 2011 Jun 1;117(11):2364-70
5. Wasserman DW, et al. J Oncol Pract. 2014 Aug 19. pii: JOP.2014.001531