

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

¹ OncoCentre, Réseau de cancérologie de la région Centre, Tours, France

² Antenne Oncogériatrie de la région Centre, Tours, France

³ CHR Orléans, Orléans, France

⁴ CH Blois, Blois, France

Title: Is older age associated with delayed adjuvant chemotherapy in colon cancer? An epidemiological study in “Région Centre”, France

Introduction: colon cancer (CC) is the second leading cause of cancer mortality in France and in many countries. Several studies have shown the negative prognostic impact of a delay to adjuvant postoperative chemotherapy (AC) beyond the 42th postoperative day. While programs in several countries aim to reduce these delays, little is known about associated factors.

Objective: Our aim was to investigate the role of age on the delay between colectomy and initiation of AC in CC.

Methods: in this retrospective observational epidemiological study, cases were selected from our hospital discharge database. All adult patients operated on for CC stage II or III in “Région Centre” in 2013, were included. Patients with rectal cancer or with past history of CC were excluded. For each case, time to AC and likely non-organizational associated factors (socio-demographic factors including age, circumstances of diagnosis, emergency or elective surgery, and postoperative morbidities) were collected from medical record. Univariate and multivariate analysis were performed using linear regression generalized model (LGM).

Results: among the 408 patients who underwent colectomy, 182 (sex ratio 1.5; mean age 67.6 years; range 32-90) received AC. Patients with AC were younger than those without AC (respectively 67.6 vs 77.9 years, $p < 0.001$). This difference was greater in stage III only (69.0 vs 82.4, $p < 0.001$) where AC is recommended. Median time to AC was 48 days and exceeded 42 days in 60% cases. In multivariate analysis, not living in couple and colectomy performed in emergency were the only independent factors associated with an increased delay, respectively by 8.3 and 8.6 days ($p < 0.05$). In contrast age and other factors were not associated with delayed time to AC.

Conclusions: delays to AC observed in “Région Centre” are consistent with those observed in the national study of the French National Cancer Institute INCa. In our study, age is not associated with delay to postoperative AC in CC, but rather a factor of no postoperative treatment. Reasons for omitting AC in older patients needs further investigations. Emergency colectomy and not living in couple are associated with increased delays. Due to their magnitude, these factors should be taken into account as well as organizational measures implemented to reduce delay to postoperative AC in CC.

Keywords: colon cancer, time to adjuvant chemotherapy, epidemiology, older age