# Time to Diagnosis of Early-Onset vs. "Late-Onset" Colorectal Cancer: Is there a difference?

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# BACKGROUND

Colorectal cancer (CRC) incidence and mortality is increasing in persons < 50 years old. Intervals between symptom onset and initial presentation (presentation interval [PI]) and between initial presentation and diagnosis (diagnosis interval [DI]) are not well-quantified.

# **OBJECTIVE**

Compare PI and DI between early-onset CRC (EOCRC) and persons <a>50</a>, and identify factors affecting these intervals.

### **METHODS**

In this retrospective VA-based case-control study, we identified EOCRC cases from an ongoing study and compared them to controls (CRC patients aged ≥ 50 years). We abstracted demographics, clinical features, CRC location and stage, PI, and DI. Mann-Whitney tests compared mean and median PI and DI.

# **RESULTS**

Advanced stage (III-IV) CRC was more common among the 240 EOCRC patients (mean age: 45.2, 60.8% White) than in the 234 controls (mean age: 63.8, 71.8% White): 55.4% vs 43.5%; P= 0.015. PIs and DIs, respectively, were present for 153(63.8%) and 222(92.5%) of cases and for 74(31.6%) 222(94.9%) of controls. No difference was found between median PI in EOCRC and late-onset CRC patients (42 vs 60 days, P= 0.68). The EOCRC cases had a significantly shorter median DI (41 [IQR = 16-83] vs 71 days [IQR = 32-145], P<0.0001).

# **CONCLUSIONS**

In this retrospective study, younger patients had more advanced stage CRC at diagnosis than their older counterparts. However, contrary to published data, median time to diagnosis was shorter in those < 50 years. Factors associated with the DI are forthcoming. Candidate factors include race, diagnosis year, presenting symptoms, type of initial provider, CRC stage, and CRC location.