



Location of Colorectal Adenomas and Serrated Polyps in Patients under Age 50

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Objective

- Incidence of colorectal cancer, especially located in distal colorectum, is rising markedly in young patients.
- Conventional adenomas and serrated polyps have been recognized as precursors of colorectal cancer.
- This study aims to figure out the correlation of polyp feature with polyp location in patients under age 50.

Method

- Patients under age 50 who had received colonoscopy were searched from 2010 to 2018.
- Clinical data including number, location, size and histopathology of polyps were collected.

Results

- 25,636 patients aged 18-49 were enrolled, among which 4,485 patients were reported to have polyps, with polyp detection rate of 17.5%.
- 2,484 and 2,387 patients had conventional adenomas and serrated polyps, respectively.
- 76.0% advanced adenomas and 69.5% ≥ 10 mm serrated polyps were located in the distal colorectum.
- The detection rate of advanced adenomas was higher in patients at age of 45-49.
- Patients with advanced adenomas in distal colorectum were more likely to have advanced adenoma in the proximal colon, as compared with those without distal adenomas (odd ratio, 7.83; $P < 0.001$).

Conclusions

- Among patients under age 50, advanced adenomas and ≥ 10 mm serrated polyps were predominantly in distal colorectum.
- Advanced adenomas tended to be found in patients at age of 45-49.
- Our results might explain the rising trend of distal colorectal cancer and emphasize the necessity for colonoscopy screening among these population.

	Conventional adenomas					Serrated polyps			
	Overall	Proximal colon	Distal colorectum	Multi-region		Overall	Proximal colon	Distal colorectum	Multi-region
All	2,484	931 (37.5%)	1,752 (70.5%)	199 (8.01%)		2,387	615 (25.8%)	1,893 (79.3%)	121 (5.07%)
Age (year)									
18-34	328	110 (33.5%)	228 (69.5%)	10 (3.05%)		512	121 (23.6%)	413 (80.7%)	22 (4.30%)
35-44	1,076	386 (35.9%)	773 (71.8%)	83 (7.71%)		1,016	255 (25.1%)	811 (79.8%)	50 (4.92%)
45-49	1,080	435 (40.3%)	751 (69.5%)	106 (9.81%)		859	239 (27.8%)	669 (77.9%)	49 (5.70%)