

## COLORECTAL CANCER

### Statins may prevent development and progression of adenomatous polyps

A US study reports that long-term statin use in patients who have had an adenomatous colon polyp (ACP) removed reduces incidence of new polyps and progression of established polyps.

Previous studies suggested that statins might protect against the development of colorectal cancer; however, whether this protection results from statins preventing malignant transformation in established polyps, or the development of new polyps, or both, has been unclear. “No study had addressed this issue specifically,” says lead researcher Dr Ali Siddiqui, who conducted this retrospective study with colleagues at the Dallas Veterans Affairs Medical Center. The team reviewed data on 2,626 patients who had an ACP diagnosed and removed at their first colonoscopy and were followed up with repeat colonoscopies at 3 and 5 years. “Our center has an extremely sophisticated medical data computer

system and this made gathering data very accurate,” says Siddiqui. Patients were divided into two groups: continuous statin users ( $n = 1,688$ ) and noncontinuous statin users ( $n = 938$ ). The characteristics of these two groups were compared.

“Our data ... potentially show[s] ... why statin[s] ... may decrease the incidence of colorectal cancer”

Patients who used statins continuously had a 16% reduction in incidence of new ACPs detected on follow-up colonoscopy compared with noncontinuous statin users (35% versus 51%). Furthermore, continuous statin use was associated with a significant reduction in incidence of progression of established ACPs, and significantly smaller mean polyp size.

“Our data is important because it [sic] potentially shows a reason why statin use may decrease the incidence of colorectal cancer,” Siddiqui explains. Their data suggest that statins may reduce the development of colorectal cancer, at least in part, by reducing the development of new ACPs and the formation of advanced ACPs. The authors plan to conduct a prospective clinical trial to confirm that statins have a chemopreventative role in reduction of colon-polyp formation and progression. Future *in vitro* and *in vivo* studies could delineate the exact ways in which statins influence biological behaviors of polyps.

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**Original article** Siddiqui, A. A. *et al.* The long-term use of statins associated with a decreased incidence of adenomatous colon polyps. *Digestion* 79, 17–22 (2009).