

Does the Impact of Colonoscopic Polypectomy and Colonoscopic Surveillance Vary by Baseline Risk Factors?

*Ann Zauber, Iris Vogelaar, Marjolein van Ballegooijen,
and Sidney Winawer*

The National Polyp Study demonstrated that colonoscopic polypectomy was associated with a 76% to 90% reduction in colorectal cancer incidence. This reduction was achieved with initial polypectomy followed by colonoscopic surveillance at 3 year intervals. Of interest is whether colonoscopic surveillance could be tailored to longer intervals in accordance with the characteristics of the baseline adenomas and yet still achieve a comparable reduction in colorectal cancer incidence. We used the MISCAN microsimulation model to assess the impact of colonoscopic polypectomy with and without colonoscopic surveillance to assess whether lower risk adenoma patients could lengthen the surveillance interval without impacting on the colorectal cancer incidence reduction. Given that the risk of colorectal cancer was higher in those with 3 or more adenomas, both the impact of the initial colonoscopy and the surveillance colonoscopies was greater for the higher risk patients and the effect of the colonoscopic surveillance was less for those with only 1 or 2 adenomas at initial polypectomy. These results suggest that the interval for colonoscopic polypectomy can be extended to 6 or more years in the lower risk patients. This approach would conserve colonoscopy resources to expand to more screened without diluting the marked effect of colonoscopic polypectomy on reducing colorectal cancer incidence.