

Is Colonoscopy Your Best Bet to Avoid Colorectal Cancer?

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STORY AT-A-GLANCE

- > Colon cancer is the third most commonly diagnosed cancer in the U.S., and the second leading cause of cancer-related deaths for both sexes combined. Despite the fact that there are multiple screening methods, most doctors simply recommend colonoscopy, which is one of the riskier methods
- > Research shows that while colonoscopies can lower your risk of a colorectal cancer diagnosis, they do not significantly reduce your risk of dying from colorectal cancer
- > Recent research concluded that about 25% of all colonoscopies performed are unnecessary
- A systematic review and meta-analysis published in 2017 concluded that regular aspirin use was as effective for preventing colorectal cancer incidence and death thereof as screening with flexible sigmoidoscopy or fecal occult blood test. And, when it came to preventing death from cancer in the proximal colon, aspirin was more effective than either of these screens
- > About 80% of endoscopes are cleaned using Cidex (glutaraldehyde), which fails to properly sterilize these tools, potentially allowing for the transfer of infectious material from one patient into another. If you must get a colonoscopy, make sure the hospital or clinic uses peracetic acid to disinfect their endoscopes. This will minimize your likelihood of contracting an infection from a previous patient

Colon cancer is the third most commonly diagnosed cancer in the United States, and the second leading cause of cancer-related deaths for both sexes combined.¹

In 2022, an estimated 106,180 Americans were diagnosed with colon cancer and another 44,850 with rectal cancer. Of those, 52,580 died.² The average lifetime risk of colorectal cancer is about 1 in 23 (4.3%) for men and 1 in 25 (4%) for women.³

Men and women over the age of 50 with average risk of colorectal cancer are typically recommended to get tested either by:4

- Stool-based tests:
 - Annual fecal immunochemical test (FIT)
 - Annual fecal occult blood test (FOBT)
 - Multi-targeted stool DNA test (mt-sDNA) once every three years
- Structural exams:
 - CT (virtual colonoscopy) once every five years
 - Flexible sigmoidoscopy (FSIG) once every five years
 - Colonoscopy once every 10 years after age 50 until age 75⁵

Despite the fact that there are multiple screening methods, most doctors simply recommend colonoscopy, and researchers have found that in most instances, doctors completely fail to review all the options and the benefits and drawbacks of each with their patients. In essence, most doctors simply choose for their patients without going through the steps of informed consent, and most often they go straight to colonoscopy.

Is Colonoscopy Your Best Choice?

The idea behind cancer screening is that by catching it early enough, your risk of dying will be lessened. However, recent research published in The New England Journal of Medicine⁶ suggests the benefits of colonoscopies may be overestimated.

While colonoscopies were found to lower a person's risk of a colorectal cancer diagnosis by 18% at 10 years when performed in healthy people between the ages of 55 and 64, the risk of actually dying from colorectal cancer was not significantly reduced, and the all-cause mortality was barely affected at all.

Let me rephrase this to make sure you understand this important point: Colonoscopies only increase the diagnosis of the cancer by 18%, but do absolutely nothing to decrease your risk of dying. As reported by the authors:⁷

"In intention-to-screen analyses, the risk of colorectal cancer at 10 years was 0.98% in the invited group and 1.20% in the usual-care group, a risk reduction of 18% (risk ratio, 0.82; 95% confidence interval [CI], 0.70 to 0.93).

The risk of death from colorectal cancer was 0.28% in the invited group and 0.31% in the usual-care group (risk ratio, 0.90; 95% CI, 0.64 to 1.16). The number needed to invite to undergo screening to prevent one case of colorectal cancer was 455 (95% CI, 270 to 1429).

The risk of death from any cause was 11.03% in the invited group and 11.04% in the usual-care group (risk ratio, 0.99; 95% CI, 0.96 to 1.04)."

1 in 4 Colonoscopies Is Unnecessary

Other recent research⁸ found as many as one-quarter of all colonoscopies are unnecessary. As reported by the Lown Institute:⁹

"... many people are screened for cancer even though they are unlikely to benefit. Nursing homes often screen very old people for cancer, even though they are likely to be harmed by surgery or treatment if cancer was found.

In one 2014 study,¹⁰ among older patients with very high mortality risk, 40% were screened for colorectal cancer. In another large survey,¹¹ more than half of people over the recommended screening age reported being screened for colorectal cancer.

How often do we give patients colonoscopies who are too young, too old, or had another screening too recently ...? In the first systematic review¹² of screening colonoscopy overuse, researchers ... provide an estimate.

They examined six studies which included about 250,000 screening colonoscopies. Overall, the rate of overuse among these studies ranged from 17% to 25.7%.

With 6.3 million screening colonoscopies performed in the US each year (before COVID), at least one million — and as many as 1.6 million — are unnecessary. This means many people are at unnecessary risk of harm from potential colonoscopy complications such as bleeding, perforated bowels, and even death."

The elderly are the most vulnerable when it comes to the misuse of colonoscopies. They benefit the least from the screening and have the highest risk of adverse events, yet they're also among the most heavily targeted groups for screening.

Side Effects and Drawbacks of Colonoscopies

It's important to realize that colonoscopy is not a risk-free procedure. Examples of adverse events associated with colonoscopies include:

- Infection from poorly disinfected instruments An estimated 80% of colonoscopy instruments are improperly sterilized, which can transfer infection from one patient to another. (See section below for more information.)
- Perforation of the colon and/or gastrointestinal bleeding¹³ A 2016 U.S.
 Preventive Services Task Force technical review¹⁴ estimated the risk of perforation is 4 per 10,000 and the risk of major hemorrhage 8 per 10,000. People at higher risk include those with diverticulitis, diseases of the colon, and adhesions from pelvic surgery.

- **Dysbiosis and other gut imbalances,**¹⁵ caused by the process of flushing out your intestinal tract before the procedure with harsh laxatives.
- Increased risk of stroke, heart attack and pulmonary embolism, weeks later¹⁶ —
 These side effects are thought to be a side effect of the anesthesia, which can trigger blood clots. Many experts agree you should opt for the lightest level of sedation possible, or none at all, as full anesthesia increases risks.
- False results¹⁷ False positives lead to unnecessary treatments that are nearly always harmful, in addition to the anxiety a cancer diagnosis brings.

False negatives, on the other hand, create a false sense of security. One 2006 study¹⁸ warned that doctors who rush through the exam can miss even late-stage cancer, so avoid super-busy doctors who perform dozens of colonoscopies a day.

Infections Caused by Improperly Disinfected Scopes

The primary tools used to screen for colon cancer are sigmoidoscopes and colonoscopes. These devices are not disposable, so they must be sterilized between each use. This, it turns out, poses a very significant problem that most patients are not aware of.

According to Dr. David Lewis, a retired whistleblower microbiologist with the Environmental Protection Agency, about 80% of endoscopes are cleaned using Cidex (glutaraldehyde), which fails to properly sterilize these tools, potentially allowing for the transfer of infectious material from one patient into another.

Flexible endoscopes have several basic components. One is a long, flexible tube with a tiny camera at the end, which allows the doctor to view the inside of your colon. There are also two internal channels in this tube, a biopsy channel and an air/water channel.

When the physician sees evidence of a tumor, he or she can insert a little claw through the endoscope, into the patient, and grab a piece of tissue and pull it back out through the biopsy channel. The air/water channel allows the doctor to clean the lens of the camera, which frequently gets covered with blood and other patient material.

The air/water channel is much smaller in diameter than the biopsy channel, and this is where the greatest risk of contamination originates, because while the biopsy channel is large enough to be scrubbed clean with a long brush, the air/water channel is too small to accommodate a brush.

About 80% of the time, flexible endoscopes are simply submerged in a 2% glutaraldehyde solution (Cidex) for 10 to 15 minutes to disinfect them between patients, and this simply isn't sufficient to clean out the air/water channel that's been contaminated with tissue, blood and feces. As a result, this material can get flushed out into subsequent patients.

What's worse, glutaraldehyde works like formaldehyde (it's just a smaller molecule) so it basically preserves the tissue, allowing the trapped material to build up over time.

Make Sure Your Doctor Cleans the Scope With Peracetic Acid

The problem, in a nutshell, is that doctors are reusing devices that are impossible to properly clean. There is a safer cleaning alternative, however, and knowing this could very well save your life.

66 If you're compelled to get a colonoscopy or flexible sigmoidoscopy, contact the office before the procedure and make sure they are properly decontaminating the scope using peracetic acid. 99

About 20% of flexible endoscopes in the U.S. are cleaned with peracetic acid between patients rather than Cidex. Peracetic acid (which is similar to vinegar) is used in organic chemistry labs to dissolve proteins, and it does a far better job than glutaraldehyde.

So, if for whatever reason you are compelled to get a colonoscopy or flexible sigmoidoscopy, then it is IMPERATIVE that you contact the office before the procedure to make sure they are properly decontaminating the scope using peracetic acid.

The reason most clinics use Cidex is because it's cheaper. Even pennies per procedure add up when you're doing them by the thousands each year, and hospitals are under pressure to save money wherever they can. However, when your health and life are at stake, saving pennies becomes inconsequential, and you'd be wise to forgo any hospital that still uses Cidex to clean their equipment.

How will you know how any given facility cleans their scopes? You have to ask. If you're having a colonoscopy or any other procedure using a flexible endoscope done, be sure to ask:

- How is the endoscope cleaned between patients?
- Specifically, which cleaning agent is used?
- How many of your colonoscopy patients have had to be hospitalized due to infections?

If the hospital or clinic uses peracetic acid, your likelihood of contracting an infection from a previous patient is slim. If the answer is glutaraldehyde, or the brand name Cidex, cancel your appointment and go elsewhere. As for the third and last question, the answer you want is zero.

The Surprising Benefits of Aspirin

Interestingly, research has shown colonoscopies may be unnecessary if you're taking daily aspirin. While this may sound too good to be true, researchers found that aspirin can, in fact, eliminate certain cancerous tumors, such as liver tumors.¹⁹

A systematic review and meta-analysis published in 2017^{20,21} also concluded that aspirin was as effective for preventing colorectal cancer incidence and death thereof as screening with flexible sigmoidoscopy or FOBT, and aspirin was actually more effective

for preventing death from cancer in the proximal colon. As reported by the authors of that analysis:²²

"The effect of aspirin on colorectal cancer mortality was similar to FOBT and flexible sigmoidoscopy. Aspirin was more effective than FOBT and flexible sigmoidoscopy in preventing death from or cancer in the proximal colon. Aspirin was equally effective as screening in reducing colorectal cancer incidence, while flexible sigmoidoscopy was superior to FOBT.

Conclusions: Low-dose aspirin seems to be equally effective as flexible sigmoidoscopy or guaiac FOBT screening to reduce colorectal cancer incidence and mortality, and more effective for cancers in the proximal colon. A randomized comparative effectiveness trial of aspirin vs. screening is warranted."

There is even a study²³ of over 600,000 men and women in which aspirin use at least 16 times per month was associated with a 40% reduced risk of colon cancer mortality over the six-year study period.

A 2016 study²⁴ in JAMA Oncology also found aspirin use staved off colorectal cancer. This study included nearly 136,000 people who were followed for 32 years. Taking either a 325 mg tablet or an 81 mg tablet at least twice a week reduced overall cancer incidence by 3%, the risk for gastrointestinal cancer by 15% and colorectal cancer by 19%.

What might explain these findings? Well, there are several potential mechanisms by which aspirin can be helpful against cancer, including the following:

- Aspirin is a prostaglandin inhibitor, so it can help address hormone imbalances that contribute to colorectal cancer development
- It lowers your iron, which is another potential cancer contributor
- It has anti-inflammatory effects

• It has anti-lipolytic effects, so it inhibits insulin resistance and Type 2 diabetes, both of which are risk factors for cancer

If you decide to implement this recommendation it is likely that taking one regular aspirin a day, preferably with your largest meal to avoid any gastrointestinal damage, would be the best strategy. If you are taking blood thinners, are very sick, or are on multiple medications, using willow bark would likely be a safer option.

Should You Get Routine Colonoscopies After 50?

I'm 68 and I've never had a colonoscopy and have no plans of ever getting one. While I believe they can be valuable in some circumstances, I feel confident that with my rigid avoidance of omega-6 LA and lifestyle it's highly unlikely I would ever develop any cancer, let alone colon cancer. For those at high risk, however, colonoscopies may be useful.

Another alternative is to get tested by flexible sigmoidoscopy every five years. It's similar to a colonoscopy, but uses a shorter and smaller scope, so it cannot see as far up into your colon. It's associated with far fewer complications, but you still need to check with the hospital or clinic to make sure they're using peracetic acid to clean the device.

Overall, visual inspection is the most reliable way to check for colon cancer, and this is what the colonoscopy allows your doctor to do. If polyps are found in their early stages, your doctor can simply snip them off right then and there. So, a colonoscopy is not only a diagnostic tool, it can also serve as a surgical intervention. They take a picture of the polyp, clip it, capture it, and send it to biopsy. So, it could save your life, and it's definitely something to consider.

However, you do not want to risk complications or infections by having the procedure done with a contaminated piece of equipment! So, please remember to make sure they're using the proper cleaning solution. It could save your life.

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