

Colorectal Cancer Screening Age Limit Criticized

BY DAMIAN McNAMARA

HOLLYWOOD, FLA. — Nearly 50% of patients diagnosed with colorectal cancer at two large tertiary-care hospitals in Michigan would fall outside recommendations that limit routine screening to patients who are 50-75 years of age.

Last year, the U.S. Preventive Services Task Force released a recommendation statement following two studies that assessed expected health outcomes and resource utilization from screening with fecal occult blood testing, sigmoidoscopy, and colonoscopy (*Ann. Intern. Med.* 2008;149:627-37).

This report recommends against routine screening of patients aged 76-85 years, but notes that screening may be warranted in some individuals outside of that age group. They also recommended against screening any adult older than 85 years.

Dr. Jason Shellnut and his associates launched a study to assess the appropriateness of these guidelines at William Beaumont Hospital System in Royal Oak, Mich. They identified 6,925 patients with colorectal cancer treated at one of their two referral hospitals

with a total of 1,357 beds between January 1973 and December 2007. They divided patients into three groups by age at diagnosis—younger than 50 years, 50-75 years, or older than 75.

They also evaluated the 35 years' worth of data in 5-year increments to assess trends over time.

"Not screening those older than 75 and younger than 50 would miss 49% of our diagnosed patients in the last 5-year period [2003-2007]," said Dr. Shellnut, a colorectal surgery fellow at William Beaumont Hospital. This 49% is a significant increase, compared with 36% in the first 5 years (1973-1978) of the tumor registry data. Most of the increase is attributed to the older patient group.

The percentage of patients older than 75 years at diagnosis rose from 29% (1973-1978) to 40% (2003-2007). This includes a significant increase in patients older than 85 years, from 6% to 12%. In contrast, the percentage of patients younger than 50 did not change

significantly from 1973 to 2007, staying within a 6%-8% range.

At the same time, the percentage of patients in the age range recommended for screening declined significantly. Specifically, patients who were in the age range of 50-75 years decreased from 64% (1973-1978) to 52% (2003-2007) of those diagnosed.

The researchers looked for any differences in pathologic stage and tumor location. "Pathologic stage data did not vary [significantly] across the years," Dr. Shellnut said at the annual meeting of the American Society of Colon and Rectal Surgeons.

However, patients under 50 years old were significantly more likely to present with advanced disease: 51% were diagnosed with either stage III or IV colorectal cancer, compared with 41% of the 50- to 75-year-olds and 35% of patients older than 75.

Dr. Shellnut had no conflicts to disclose. ■



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DR. SHELLNUT

Screening Colonoscopy Not Beneficial Beyond Age 70

BY DAMIAN McNAMARA

MIAMI BEACH — The use of colonoscopy to screen for colorectal cancer may cause net harm if continued beyond age 70, according to a clinical- and cost-effectiveness study. Fecal occult blood testing, on the other hand, remained both effective and cost-effective up until age 80 years.

Many guidelines recommend routine colorectal cancer screening for adults aged 50-75 years and individualized decisions in the elderly, including a 2008 recommendation statement from the U.S. Preventive Services Task Force (*Ann. Intern. Med.* 2008;149:627-37). But the effectiveness and incremental costs of continuing to routinely screen older people have not been well quantified in the literature, Dr. Sandeep Vijan said at the annual meeting of the Society for General Internal Medicine.

Colorectal cancer and polyps are clearly more common in the elderly, Dr. Vijan said. "However, potential benefits of screening are limited. If it takes a long time for a polyp to become cancer, you need a relatively long life expectancy to make polyp removal worthwhile," Dr. Vijan said.

He and his colleagues developed a Markov decision model to assess the incremental cost-effectiveness of screening patients with a colonoscopy once each decade after age 50 and with fecal occult blood testing (FOBT) annually. "We assumed an adherence rate of 60%, which is in the ballpark, but may be a little optimistic," said Dr. Vijan, who is on the internal medicine faculty at the University of Michigan, Ann Arbor. He is also an investigator at the Ann Arbor Veterans Affairs Center for Clinical Management Research.

"From 66 years to 85-plus the bleeding and perforation risks double," according to Medicare data, Dr. Vijan said. For example, risk of bleeding was 0.49% for the 66- to 69-year-old cohort and increased to 1.15%

among those 85 and older. Their model also incorporated polyp prevalence data from autopsy and screening colonoscopy studies, and colorectal cancer rates from the Surveillance, Epidemiology, and End Results (SEER) database.

If colonoscopy is stopped at age 60 years, life expectancy beyond age 50 is 17.1651 years and screening costs \$1,554 in 2006 dollars. (All life expectancies are discounted from a value of about 27 years, based on economic present-value analysis.) If colonoscopy stops at age 70, life expectancy increases very slightly to 17.1670 years beyond age 50—"essentially a day"—and costs \$1,623. But an additional colonoscopy at age 80 "actually causes harm," Dr. Vijan said. The additional colonoscopy was associated with a decrease in life expectancy to 17.1668 years beyond age 50 and a cost of \$1,648. Also, "if a patient has actually had a colonoscopy at ages 50 and 60, then even a third one at age 70 ends up being harmful," he noted.

"This fits with the recent U.S. Preventive Services Task Force report to stop [screening] at age 75," he said. "From a population perspective, stopping colonoscopy after age 70 seems appropriate."

But the findings suggest that FOBT is cost-effective for screening up to about age 80. For example, at age 76, FOBT is associated with a life expectancy of 17.1485 years beyond age 50 and costs \$1,336. Continuing annually to age 80 is associated with an added life expectancy of 17.1489 years and costs \$1,355.

The findings do not apply to people with no prior screening, "so if someone is 80 and has never been screened, it might be effective." Also, the study did not address screening of high-risk patients and did not assess complex strategies such as two colonoscopies followed by subsequent FOBT. Dr. Vijan said that alternative strategies, such as mixed testing approaches, should be evaluated in future research. ■

Even Occasional Drinking Puts NASH Patients at Risk

BY MICHELE G. SULLIVAN

CHICAGO — Drinking even two or fewer alcoholic drinks per day nearly quadruples the risk of hepatocellular carcinoma in patients with cirrhosis due to both nonalcoholic steatohepatitis and hepatitis C infection, a prospective study has concluded.

The study is the first to confirm such a link in patients with nonalcoholic steatohepatitis (NASH), and emphasizes the need for proactive counseling among these patients, Dr. Nizar Zein said at the annual Digestive Disease Week.

"Physicians following these patients should counsel complete abstinence of alcohol," Dr. Zein said in an interview. "If we can get them to do that, we may in the future be able to lower the burden of cancer associated with this disease."

About 20% of patients with NASH will develop cirrhosis, a proven risk factor for hepatocellular carcinoma (HCC), said Dr. Zein, chief of hepatology and medical director of liver transplants at the Cleveland Clinic. "Despite this link, there is a lack of large population studies regarding the risk of HCC in patients with cirrhosis due to NASH."

To study this question, Dr. Zein and his colleagues performed a retrospective analysis of 510 patients with cirrhosis not related to alcohol intake, who were treated at the clinic from 2003 to 2007. Cirrhosis was due to NASH in 195 patients, and to hepatitis C viral infection in 315. Patients with NASH were significantly older than those with hepatitis C (57 vs. 45 years). They also had a sig-

nificantly higher body mass index (35 vs. 28 kg/m²). The mean score on the Model for End-Stage Liver Disease (MELD) scale was 11 in the NASH group and 12 in the hepatitis group—not a significant difference.

Over the 3-year follow-up period, 18% of the entire study population developed HCC. The rate was significantly higher in the hepatitis group than in the NASH group (20% vs. 13%). The yearly HCC incidence was also significantly higher in the hepatitis C group than in the NASH group (4% per year vs. 3% per year).

A multivariate analysis examined risk factors associated with the development of HCC in those patients with NASH. Not surprisingly, older age at cirrhosis diagnosis was significantly associated with developing cancer, increasing the risk by 7%.

Even patients who drank only small amounts (fewer than two drinks per day) were almost four times more likely to develop HCC than were nondrinkers (hazard ratio 3.6). Heavy drinking (more than two drinks per day) increased HCC risk to the same extent as social drinking. Body mass index, smoking, diabetes, and MELD score were not significantly related to HCC in patients with NASH.

"This study shows for the first time that patients with NASH are at high risk for HCC, especially if they drink, and, as such, would probably benefit from a regular screening strategy," Dr. Zein said.

No studies have addressed the optimum screening method. However, Dr. Zein said, a reasonable option might be ultrasound examination every 6 months. ■