MCC Michigan Cancer Consortium
Your Michigan Cancer Information Resource

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Quick News & Links:

MPRO released a one hour recorded webinar on lung cancer screening. Free CME available.

State of Michigan launches online map of free Wi-Fi hotspots to help residents who lack access to broadband internet.

Having an event? Send us the details to post on the MCC Calendar of Events page!

MCC Calendar of Events

Weighing the Risk of Covid-19 with Delays in Cancer Screening and Treatment

Is there ever a good time to worry about being screened or treated for cancer? Alas, not. But thanks to the covid-19 pandemic, this is an especially troubling one. Last month, Norman E. Sharpless, director of the National Cancer Institute, issued a warning about the dangers of the pandemic to past, present, and future cancer patients. Sharpless pointed to an NCI model examining colon and breast cancer that forecasts an additional 10,000 deaths in the United States from those two cancers alone over the next 10 years because of the pandemic. Sharpless emphasized that this is a “conservative” number; it doesn’t take into account other cancer types, the impact of upstaging (being staged later due to delays in being seen, probably with more extensive disease), and assumes only a moderate disruption in care that will be completely resolved after six months (which is to say it is not taking into account a “second wave” of the pandemic that would probably result in even more deaths than in the forecast).

Statistics from Epic, the electronic health records vendor, show cancer screenings going off a cliff at the beginning of the pandemic, down between 86 and 94 percent across the United States — a combination of hospitals deferring nonurgent procedures and patients fearing contracting the virus at a health-care facility. The number of Americans getting breast cancer screenings (mammograms) each week dropped from 9,000 or so to fewer than 600. Colon cancer screenings went from 3,000 a week to 400. Fewer screenings mean fewer diagnoses, and fewer diagnoses mean fewer opportunities for early treatment.

Who gets screened or treated? Who should wait? How much does covid prevalence in a community matter? At the outset of the pandemic many oncology departments and hospitals created cross-institutional guidelines that largely triaged cancer patients into three buckets or tiers: treat now; delay a little (six to eight weeks); delay a lot.

Read more about Weighing the Risk of Covid-19 with Delays in Cancer Screening and Treatment.

Current State of Universal Screening for Lynch Syndrome in Colorectal and Endometrial Carcinomas

Submitted by the Michigan Cancer Genetics Alliance (MCGA), June 2020

Lynch syndrome (LS) is a hereditary cancer condition which causes an increased risk for colorectal, endometrial, ovarian, small bowel, gastric and other cancers. In the United States, universal screening for Lynch syndrome (LS) in all newly diagnosed colorectal and endometrial cancers is recommended. LS screening can be accomplished using immunohistochemistry staining (IHC) and/or microsatellite instability (MSI) testing. IHC involves analyzing tumor tissue to determine if proteins associated with LS (MLH1, MSH2, PMS2, MSH6) are missing (absent staining). If one or more of these proteins is missing, sometimes additional testing is needed to aid in determining the significance of the result, e.g., BRAF gene testing and/or MLH1 promoter hypermethylation studies. These studies are used to evaluate whether there was somatic (not inherited) silencing of LS proteins in the tumor. MSI testing involves determining if the tumor is in a state of genetic hypermutability due to impaired DNA mismatch repair (MMR), which can be indicative of LS. Approximately 15-18% of colorectal carcinomas show MMR deficiency[2].

Absent mismatch repair proteins and/or evidence of MMR indicates an increased chance that the patient has Lynch syndrome but it is not a certainty as these features can be seen in a subset of sporadic cancers as well. In some cases, sequencing of mismatch repair genes in the tumor sample (somatic testing) is utilized to clarify the significance of IHC/MSI results or even used to replace standard MSI and/or IHC testing.[1] Universal screening for LS by IHC/MSI or somatic sequencing of the mismatch repair genes are key in identifying patients who would benefit from a genetic counseling referral to further evaluate the risk of LS.

Although universal screening recommendations have been available since 2009, there is no consensus regarding the optimal methods to use. Hospital systems tend to develop their own protocols utilizing either MSI, IHC or both.

Hissong et al (2018) proposed a cost-effective algorithm for optimal LS screening in all colorectal carcinomas using MSI and/or IHC. The algorithm was developed based on a survey sent to pathologists at 185 academic and nonacademic practices in Europe, Canada, and Australia, 96 of whom participated. The flowchart below outlines the proposed screening methodology which starts with IHC and reflexes to other testing (BRAF, MLH1 promoter hypermethylation, MSI) as needed.

The Michigan Department of Health and Human Services Cancer Genomics Program partnered with the Cancer Registry in 2018 to determine implementation rates, barriers and universal screening methods in Michigan hospitals. Of responding facilities, 67.7% were screening all colorectal cancers for LS, and 38.7% were screening all endometrial cancers. These numbers, optimally, should be 100%. Facilities that were screening used IHC only, MSI only, or MSI with IHC. Stepwise processes such as the algorithm outlined above were not included in the survey. With education and awareness, we hope to raise the proportion of facilities screening routinely for LS in Michigan, ideally following a cost-effective approach optimal for screening.

Current State of Universal Screening for Lynch Syndrome in Colorectal and Endometrial Carcinomas (Continued)

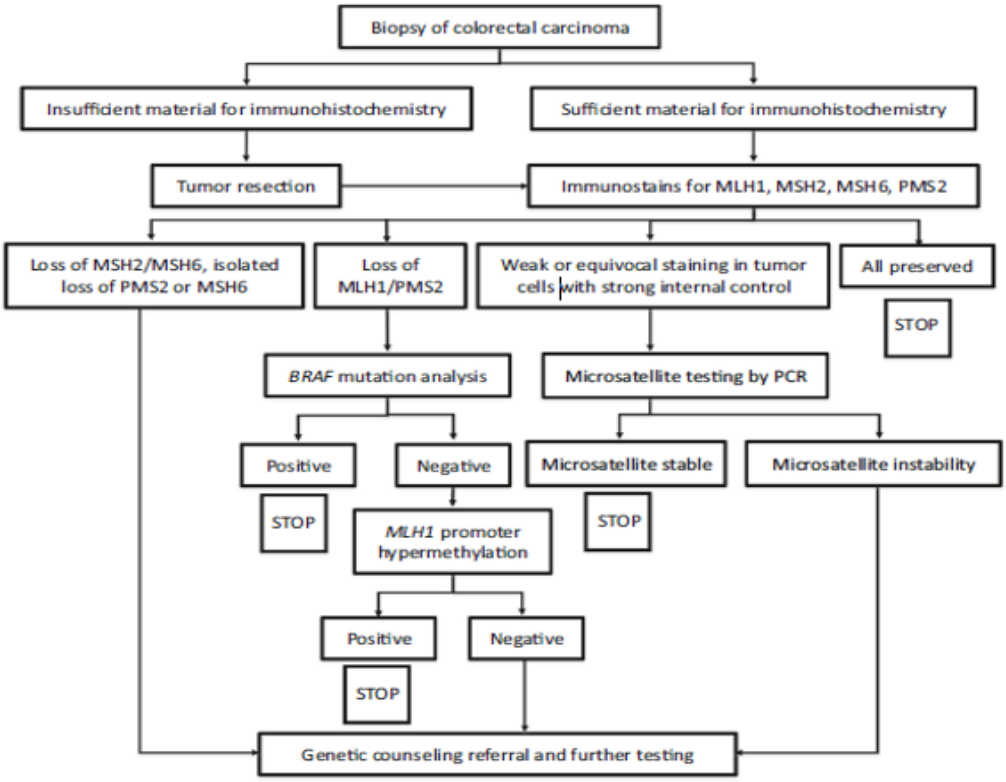

Figure 1. Proposed algorithm for the evaluation of mismatch repair status in colorectal carcinomas (Hissong et al.)

References:

1. Hampel, Heather & Pearlman, Rachel & Beightol, Mallory & Zhao, Weiqiang & Jones, Daniel & Frankel, Wendy & Goodfellow, Paul & Yilmaz, Ahmet & Miller, Kristin & Bacher, Jason & Jacobson, Angela & Paskett, Electra & Shields, Peter & Goldberg, Richard & De La Chapelle, Albert & Shirts, Brian & Pritchard, Colin. (2018). Assessment of Tumor Sequencing as a Replacement for Lynch Syndrome Screening and Current Molecular Tests for Patients with Colorectal Cancer. JAMA Oncology. 4. 10.1001/jamaoncol.2018.0104.
2. Hissong, E., Crowe, E.P., Yantiss, R.K. *et al.* Assessing colorectal cancer mismatch repair status in the modern era: a survey of current practices and re-evaluation of the role of microsatellite instability testing. *Mod Pathol* **31,** 1756–1766 (2018). https://doi.org/10.1038/s41379-018-0094-7
3. NCCN. National Comprehensive Cancer Network guidelines for colorectal cancer screening. Version I.2020. Available from: https://www.nccn.org/professionals/physician_gls/pdf/genetics_bop.pdf

Thrive After Cancer: "Talk to Someone" Simulation Now Available in Spanish

A new release of the "Talk to Someone" simulation featuring Linda, a five-year cancer survivor, is now available in Spanish. "Talk to Someone" gives cancer survivors useful tips for living well after cancer.

Linda gives advice to help fellow survivors start and maintain healthy habits. Cancer survivors can talk with Linda about anxiety and distress, alcohol use, tobacco use, and physical activity and nutrition. Linda is a virtual friend and coach who encourages survivors to take steps to live a longer, healthier life.

Good Luck Taylor and Thanks for Your Work in Cancer Prevention and Control!

Taylor Olsabeck, the cancer epidemiologist who worked with the MDHHS Cancer Prevention and Control Section for two years, recently accepted a position as the lead epidemiologist for Barry-Eaton Health Department. Her last day with the cancer section was July 31. Taylor made many positive contributions to our collective work in cancer prevention and control. This includes Michigan Cancer Consortium Annual Reports and the new 10-year cancer plan being developed in which she provided invaluable data guidance during the planning process.

In addition, her work is well-documented in other areas as evidenced by this comprehensive MDHHS cancer epidemiology webpage that features fact sheets, burden reports, and a cancer atlas. Importantly, her work also ensured that health disparities data is well represented in plans, reports, and fact sheets.

We will miss Taylor and wish her the very best in her new position.

2020 MCC Meetings

2020 Board Meetings:
Wednesday, September 23 – Virtual Meeting

2020 Annual Meeting:
Thursday, October 29 – Virtual Meeting

Health Equity Corner

Advancing the Response to COVID-19: Sharing Promising Programs and Practices for Racial and Ethnic Minority Communities

The HHS Office of Minority Health (OMH) is hosting a virtual symposium on Thursday, September 17, 2020 to highlight state, tribal, territorial, and community-based efforts to address COVID-19 among racial and ethnic minority populations. The
national, state, tribal and local experts leading these efforts and is developed for public health leaders at all levels and community organizations confronting the pandemic.

According to the Centers for Disease Control and Prevention (CDC), a history of systemic health and social inequities have put racial and ethnic minority groups at an elevated risk of contracting COVID-19 or experiencing severe illness, regardless of age. CDC data suggests the prevalence of diabetes, cardiovascular disease, and other underlying conditions also contribute to disparities in health outcomes within communities of color.

The OMH virtual symposium aims to support the dissemination of promising practices, programs, and strategies for combating COVID-19, especially in racial and ethnic minority communities.