Allina Health

Virginia Piper Cancer Institute Clinical Service Line

System-wide Consensus Guidelines:

Identification of Patients or Family Members at High Risk for Inherited Gynecologic Cancers

These guidelines apply to clinical interventions that have well-documented outcomes, but whose outcomes are not clearly desirable for all patients

Reference #: SYS-PC-VPCI-CG-005

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Approval Date: September 2016
Approved By: Allina Health Quality Council

System-wide Ownership Group: Allina Health Gynecologic Cancer Program Committee
System-wide Information Resource: Director of Clinical Programs

SCOPE:

Sites, Facilities, Business Units	Departments, Divisions, Operational Areas	People applicable to
Abbott Northwestern Hospital, Buffalo Hospital, Cambridge Medical Center Mercy Hospital, New Ulm Medical Center, River Falls Area Hospital, St. Francis Regional Medical Center, United Hospital, Unity Hospital, Allina Health Group.	Gynecologic Oncology Gynecology Virginia Piper Cancer Institute	MDs (Allina Health and Minnesota Oncology), Advanced Practice Providers, RN Cancer Care Coordinators, Genetic Counselors

PICO(TS) Framework:
Population: patients at risk for invasive ovarian cancer
Intervention: Genetic evaluation and referral
Comparison: pre/post; no referral
Outcomes: newly diagnosed; Lynch positive
Timing: n/a
Setting: Gynecology Oncology; VPCI

CLINICAL PRACTICE GUIDELINES:

The Allina Health Gynecologic Cancer Program Committee (GCPC) endorses the nationally published evidence-based recommendations for the following patient populations and are summarized below:

1) All newly diagnosed invasive ovarian cancer patients will be assessed for hereditary cancer syndromes at the time of diagnosis because it can influence clinical management. (NCCN:Clinical Practice Guideines in Oncology: Genetic/Familial High-Risk Assessment: Breast and Ovarian Version1.2015(1) and ACCO (6)
2) Identification of Lynch patients to prevent other related Lynch cancers and possibly afford additional treatment options. (ACOG) (13) (see related policy on universal tumor testing for Lynch syndrome instituteed by Allina Health's pathologists).
3) Genetic evaluation is best done in the context of genetic counseling. (NCCN, ACMG, ACOG)
4) The following patients will be referred for assessment by a genetic counselor to determine propriety of genetic testing, select the right testing, faciliate testing if needed and interpret for patient and family:
   A. Women with an invasive ovarian cancer, fallopian tube or primary epithelial cancers (usually non-mucinous, non-borderline) will be offered BRCA1 and BRCA2 testing, alone or as part of a panel.[i] (1,4,6)
   B. Women with close relatives (1st and 2nd degree relatives) of the above.(1)
   C. Women with uterine cancer who have a positive IHC (immunohistochemistry) screening for the lynch proteins (13)
   D. In addition, consideration for women who have uterine cancer diagnosed <age 50, has uterine cancer +macrocephaly, has significant cluster of cancer, or patient is concerned.(3)
   E. Women with a sertoli-leydig cell ovarian cancer should be referred for consideration of DICER1 gene testing, as up to ~50% may have such mutations.(14,15)

[i] (*BRCA*-related ovarian cancers are associated with epithelial non-mucinous histology. Other cancer genetic syndromes might be associated with mucinous ovarian cancer. Non-epithelial ovarian cancer may be associated with PJS and possibly other cancer syndromes. Ovarian/fallopian tube/primary peritoneal cancers are component tumors of Lynch syndrome; these possibilities can be addressed during consult)

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SUPPORTING EVIDENCE:

NCCN-2015 recommends the referral for all with invasive ovarian cancer, and for purpose of guideline, this includes fallopian tube and primary peritoneal cancers. The results may impact availability of FDA approved Olaparib for treatment and have significant impact on personal risks for additional primaries and risk and management options for screening and prevention for family members. (1)

The literature shows that approximately 20% of such individuals will have a BRCA1 or BRCA2 mutation and another 5-6% will have a mutation in another susceptibility gene, regardless of age and history (e.g. >40% with mutations had no other family history of breast or ovarian cancer and >30% were diagnosed after age 60).(4)
US Preventive Services Task Force (USPSTF) provided a grade B for Women who have Family Members with Breast, Ovarian, Tubal, or Peritoneal Cancer. The USPSTF recommends that primary care providers screen women who have family members with breast, ovarian, tubal, or peritoneal cancer with 1 of several screening tools designed to identify a family history that may be associated with an increased risk for potentially harmful mutations in breast cancer susceptibility genes (BRCA1 or BRCA2). Women with positive screening results should receive genetic counseling and, if indicated after counseling, BRCA testing. (2,3)

The Lynch Universal screening has been done since 2012-2013. It is only cost effective and save lives if we provide good patient and family reach for those who have a true positive screen. Follow up genetic counseling of these patients will help in this process. The literature supports that the identification and proper screening of those with Lynch syndrome saves lives. See Colon committee guidelines for ID of high risk colon cancer patients.

MONITORING AND COMPLIANCE:

We will:

- Utilize RN coordinators dashboard and/or tumor registry to track newly diagnosed ovarian cancer patients and to track the Lynch positive patients (i.e., surrogate for overall compliance).
- Establish a baseline number of candidates for referral that have not been offered referral to genetics and determine barriers to referral or follow through based on this data. (According to registry only 61 of 114 ovarian cancer patients had evidence of referral to genetics in 2013-2014:53.5%).
- Obtain support from IT and GCPC to track compliance.
- GCPC will provide education to end-users of guideline.
- GCPC will provide feedback to end-users when not compliant.

DEFINITIONS: NA

SPECIAL ENTITIES: NA

FORMS: NA

ALGORITHM: NA

ADDENDUM: NA

REFERENCES:

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14. Stewart CJ, Charles A, Foulkes WD. Gynecologic Manifestations of the DICER1 Syndrome Surg Pathol Clin. 2016 Jun;9(2):227-41. doi: 10.1016/j.path.2016.01.002. Epub 2016 Apr 9.

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Alternate Search Terms: N/A

Related Guidelines/Documents:

Name	Content ID	Business Unit where Originated
Universal tumor testing for Lynch syndrome		Allina Pathology (Hospital Pathologist Assoc)
Identification of Breast Cancer Patients at Risk for Inherited Cancer Risks	SYS-PC-VPCI-CG-002	VPCI
Identification of Colon Cancer Patients at Risk for Inherited Cancer Risks	SYS-PC-VPCI-CG-001	VPCI