Prospective evaluation of a facilitated referral pathway to improve uptake of genetic assessment for women with newly diagnosed ovarian cancer.

Authors
Melissa K. Frey
Sarah Lee
Jessica Martineau
Jing-Yi Chern
Emily Dalton
Courtney Grosvenor
Leslie Boyd
Bhavana Pothuri
John Curtin
Stephanie Blank

Objectives: Approximately 30% of ovarian cancer is attributable to germline mutations and genetic assessment is recommended for all women with ovarian cancer. However, only 15-30% of women are currently being offered genetic evaluation. We sought to determine if a patient-centered, facilitated genetics referral pathway whereby all newly diagnosed ovarian cancer patients are immediately contacted by a genetics navigator to schedule genetic assessment as part of routine care could increase rates of genetic counseling and uptake of genetic testing.

Methods: Patients with epithelial ovarian cancer were referred for genetic assessment by their gynecologic oncologist within six weeks of diagnosis and consented for participation in our IRB approved facilitated genetics pathway. Enrolled patients were contacted by a genetics navigator to schedule an appointment with a genetic counselor within six weeks. Patients who did not schedule or missed sessions were recontacted by the navigator. The genetic counselors offered pre/post-test counseling and multigene panel testing. Primary outcome was feasibility of this pathway as defined by presentation for genetic assessment or declining genetic evaluation.

Results: From 10/2015-7/2016, 50 patients were enrolled. Thirty-six patients (72%) had a genetic assessment and of these patients 34 (94%) underwent genetic testing. Three patients (6%) are currently scheduled for appointments. Eleven patients (22%) did not undergo genetic assessment for the following reasons: not interested (4), not feeling well (2), missed appointment (2), nervous about testing (1), unable to make appointment within 6 weeks (1), death (1). Median time from diagnosis to genetics appointment was 13 days (range 0-53). Among the 32 patients for whom results are available, 7 (22%) had pathogenic mutations (*BRCA1,* 4, *BRCA2,* 3).

Conclusions: The genetic testing pathway we present characterized by facilitated referral to genetic counselors at time of ovarian cancer diagnosis is both effective and efficient, resulting in genetic assessment of 72% of patients with newly diagnosed ovarian cancer and discovery of pathogenic mutations in 22% of those tested. As germline mutations have both prognostic and therapeutic implications, the time of diagnosis may present an ideal window to offer genetic testing.

		(N=50)	
Age (median, range)		62y (26-90)	
Race /Ethnicity			
	White	35	70%
	Hispanic	7	14%
	Asian	6	12%
	Black	2	4%
Ashkenazi Jewish		15	30%
Stage			
	I	8	16%
	II	7	14%
	III	17	34%
	IV	1	2%
	X	17	34%
Histology			
	Serous	34	68%
	Endometrioid	5	10%
	Clear cell	2	4%
	Mucinous	2	4%
	Other	7	14%