

Facilitated referral pathway for genetic testing at the time of ovarian cancer diagnosis: uptake of genetic assessment and testing and impact on patient-reported stress, anxiety and depression

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Objectives: To determine whether a patient-centered, facilitated genetics referral pathway whereby all women with newly-diagnosed ovarian cancer are proactively contacted by a genetics navigator (GN) to schedule genetic assessment (GA) increases rates of GA and genetic testing (GT) uptake without increased patient-reported stress, anxiety or depression.

Methods: Patients with epithelial ovarian cancer were referred for GA by their gynecologic oncologist within six weeks of diagnosis. Patients were contacted by a GN and offered an appointment for GA and GT within six weeks of contact. English-speaking patients completed quality of life (QoL) instruments (Impact of Events Scale, State-Trait Anxiety Questionnaire, Hospital Anxiety and Depression Scale) immediately pre- and post-GA and 6-9 months later. Primary outcome was feasibility of this pathway as defined by presentation for GA or declining GA within 6 weeks of contact by a GN.

Results: From 10/2015-12/2017, 88 patients were enrolled. Seventy-one (81%) patients had GA and 62 (70%, 87% of those who had GA) underwent GT. Median time from diagnosis to GA was 28 days (range 9-75). Among patient who underwent GT, 11 (18%) had a pathogenic mutation (BRCA1-6, BRCA2-4, MSH2-1) and 25 (40%) had a variant of uncertain significance. Forty-one patients completed QoL assessments which demonstrated mild to moderate stress, normal to clinically significant anxiety and borderline levels of depression. QoL assessments were not associated with the GT result and there was no significant changes in stress, anxiety or depression when comparing QoL measurements for each patient obtained pre/post-GA and 6-9 months later.

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 GA in 81% of patients within 4 weeks of diagnosis, GT in 70% of patients and discovery of pathogenic mutations in 18% of those tested, and does not demonstrate a psychologic toll.

Concern about causing additional emotional distress should not deter clinicians from early genetics referral as genetic testing in this population can yield important prognostic and therapeutic information.