

## Development of a longitudinal integrated curriculum dedicated to rare gynecologic malignancies

**Purpose:** Medical education has embraced a longitudinal integrated approach to training medical students. Built on comprehensive care of patients over time and learning from the patients' providers, this approach is thought to foster humanism and patient-centeredness. Studies have demonstrated short- and long-term success of these models.

Rare diseases, while each individually rare, impact 6-10% of the population. Alfaro et al argue that "rare diseases are a threat...as they are life-threatening or debilitating diseases with a low prevalence and a high level of complexity". Care of patients with rare diseases is thought to benefit from a patient-centered approach and care coordination.

In gynecologic oncology, we care for a variety of rare malignancies. Literature for these diseases exists in case reports and small case series. While gynecologic oncologists manage their care, there is no existing paradigm for training fellows. Beyond choosing the right treatment regimen, it is critical to understand how to counsel thoughtfully and utilize available resources to provide optimal patient-centered care. Thus, we aim to train future gynecologic oncologists in the holistic care of patients with rare gynecologic malignancies through a longitudinal integrated approach.

**Objective:** Create a longitudinal integrated curriculum for gynecologic oncology fellows to increase exposure to and understanding of rare gynecologic malignancies.

**Methods:** Meetings focused on development and implementation were held with stakeholders, including fellows and faculty. The curriculum concept was introduced to fellows and each fellow was assigned to two faculty members. A pre-curriculum survey was administered to the fellows. Learning objectives were outlined. Rare cases were identified, and fellows were incorporated as members of the treatment team. Each fellow maintains a cohort of patients with rare diagnoses. Meetings are held every 6 months for peer-lead literature and case review. Online repository has been developed and shared for future use.

**Results:** Five fellows participated in the curriculum. Pre survey found that all fellows felt it was important or very important to have a dedicated curriculum to rare gynecologic malignancies. All 5 fellows noted the lack of data to guide management as a significant challenge. They described identification of resources and national experts, as well as navigation of the literature as the skills that would be most helpful to their practice. After the first 9 months of the curriculum, each fellow has a cohort of 2-3 patients. Fellows have participated in clinic visits, surgery, multidisciplinary tumor board discussions, and external expert consultation for their patients. Cases have included rare diagnoses such as small cell carcinoma of the ovary, cervical cancer in pregnancy, gastric type cervical cancer, and glioblastoma transformed from a dermoid. Follow up assessments show that the fellows are satisfied or very satisfied

with the curriculum. Most fellows would recommend this longitudinal model in gynecologic oncology education.

Challenges to implementation include varying investment from faculty and navigating the baseline clinical workload for fellows, precluding their ability to engage consistently in a longitudinal fashion. Logistical improvements are underway.

Conclusion: A longitudinal integrated approach to teaching gynecologic oncology fellows about rare gynecologic malignancies is both feasible and impactful.