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Neuroendocrine tumors of the cervix: an urgent call for joining forces

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Neuroendocrine tumors are aggressive and develop from endocrine cells in various organs, including the female genital tract, and specifically the uterine cervix. They account for 0.9%–1.5% of all tumors of the uterine cervix and generally affect women of reproductive age. Given the rarity of the disease, limited data are currently available regarding the biology, clinical behavior, and management of such aggressive tumors. As a result, no treatment guidelines, based on prospective, well-designed clinical trials, are currently available, and the different multimodality approaches are mainly derived from neuroendocrine tumors of the lung. For these reasons, neuroendocrine tumors represent a considerable therapeutic challenge for gynecologic oncologists worldwide.

Efforts in systematically collecting and analyzing relevant series of patients with neuroendocrine tumors may constitute a real step toward a better understanding and treatment of these aggressive tumors. Sharing these efforts and knowledge may help gynecologic oncologists worldwide to better face this 'challenging battle'. To quote William Mayo: “The best interest of the patient is the only interest to be considered, and in order that the sick may have the benefit of advancing knowledge, union of forces is necessary”. Patients with cervical neuroendocrine tumors are a clear example of this urgent need.

Gloria Salvo and co-authors have provided a review of this important topic in this month’s issue of the journal[1] and add another piece to this complex mosaic. In this systematic review, the authors specifically addressed the etiology, histologic classification, and molecular profile of cervical neuroendocrine tumors. They go on to describe a diagnosis and treatment algorithm currently used at MD Anderson Cancer Center. Sharing this information is again a major contribution for gynecologic oncologists.

The treatment algorithm proposed by the authors provides for a multimodality approach. This comprises radical hysterectomy followed by adjuvant concurrent chemoradiation and chemotherapy for early-stage disease, definitive concurrent chemotherapy and radiation for locally advanced disease, and palliative chemotherapy for metastatic disease. Our group published on the utility of neoadjuvant chemotherapy followed by radical surgery in patients with early-stage disease, and this is one strategy that is still being used in many centers.[2] The most effective and commonly used first-line chemotherapy regimen for neuroendocrine tumors is the combination of cisplatin and etoposide, a regimen that was adapted from neuroendocrine tumors of the lung. New and alternate options of therapy are offered by Salvo and co-authors in this review, which certainly alerts us to the possibilities of more innovative options for future therapy in this group of patients.

The general approach, given the tendency of these malignancies for nodal involvement and distant metastases, is to use 'all the best weapons' upfront in an attempt to provide maximum local and distant control of the disease.

Furthermore, the high rate of distant failure, and the very poor prognosis of patients with advanced disease, strongly warrant the investigation and elucidation of novel systemic therapeutic options. Only a robust collaboration between gynecologic oncologists, medical oncologists, researchers, and physicians treating neuroendocrine tumors has the potential to make a real step forward in the treatment of these aggressive diseases.

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