M. Kairbayev, C. Kohler, S. Marnitz-Schulze
Gynecological Cancer Center, Kazakh Research Institute of Oncology & Radiology, Almaty, Kazakhstan
Charité Universitätsmedizin, Berlin, Germany

A Multi-disciplinary Approach in Gynecological Oncology: Opinion and Workshop Report

Malignant diseases presented with a wide range of illnesses, which are usually treated with different modalities: radiation therapy, chemotherapy, surgery or by their combination dependent mainly on the site, extent, biology of the tumour and patient's status.

The best treatment results obtained within hospitals with significant expertise in each treatment approach, which means that adequate case-load and training of the stuff are very important.

It has been shown that debulking surgery for advanced cancer of the ovary significantly more often achieved complete removal of the tumour when performed by experienced gynecological oncologist compared to general gynecologist or surgeon. Tingulstad S. et al showed two fold increase in progression free survival and significant improve in overall survival for patients who underwent surgery in teaching hospitals compared to non-teaching (1).

Annually more than 35 hundreds of new gynecological cancer patients except breast cancer are diagnosed in Kazakhstan (2). Most common of them is uterine cervix cancer with 1625 new cases and 682 deaths in 2012.

Currently treatment of cancer patients strictly confined to cancer hospitals, which are located in every region of the country. In theory, confining treatment in cancer hospitals allow to practice comprehensive treatment in nearly all cases. Despite that fact overall survival in some most common cancer types are very low and there is still significant room for improvement.

Usually all patients with suspicious or already verified malignant disease referred to cancer center where they assessed for treatment. Primary assessment provided by specialist, who discuss every case with medical oncologist and radiation oncologist or directly refer patient to them. The existing model works, however it has disadvantages. Main weakness of this approach is that no one can guarantee that specialists involved in patient care has enough experience and expertise in each case. Same situation probably will repeat every time when patient come to clinics.

It's not a secret that one can't be an expert in treating all types of cancer and provide evidence based care for all cancer sites. The better results could be guaranteed when physician focused in few types or group of cancers, i.e. colorectal, gynecological etc.

Trying to improve that approach we build a team of physicians, who have been previously involved in treatment of gynecological cancer patients in different departments of the Institute – medical oncology, radiotherapy and gynecology and bring them to one department – a gynecological cancer center. That means that all patients with gynecological cancer directly referred to the center, treated and followed up by the same team of doctors. Dedicating most of work time to gynecological cancers and being involved in weekly gynecological tumour boards and everyday discussions allow radiation oncologist and medical oncologist focus precisely on women's cancer. The main goal of the team is to provide state-of-the art treatment. Another important advantage of multi-disciplinary team is a good research environment and preparation of guidelines. In case of viability and superiority of this model of teamwork it must be strongly recommended for implementation in to other centers.

Another step was recently made to support multidisciplinary approach in gynecological cancer center with the support of Ministry of Health. Two workshops on advanced surgical procedures and uterine cervix cancer radiation therapy have been organized to fit demands of all specialists: gynecologists, radiation and medical oncologists. All participants were able to discuss each case, listen the same lectures and watch same procedures. The placement of cervical stent (sleeve) for example was performed by a surgeon and following radiation therapy introduced by radiation oncologist.

During workshop five patients underwent surgery. First patient underwent a pelvic exenteration for rare mucinous adenocarcinoma (with minimal deviation) of the uterine cervix with invasion to the bladder and rectum, but no extra pelvic disease. Second patient with clear cell endometrial cancer underwent laparoscopic staging procedure – total hysterectomy, pelvic and paraaortic lymph node dissection, omental biopsy and washings. Other three patients underwent surgical staging for cervical cancer. The procedure of surgical staging started with bilateral pelvic lymph node dissection with frozen section. In case of positive pelvic nodes, paraaortic nodes were removed to find true extent of the disease and define whether this area should be included for following irradiation or not. In case of negative nodes – staging followed with radical laparoscopic hysterectomy.

Patients with positive nodes were referred for radiation therapy. Conformal brachytherapy together with external beam irradiation were introduced at the center. All patients underwent planning, contouring and started their treatment during workshop. Medical physicists were also involved to the workshop as their role in delivering radiation therapy is crucial.

In conclusion we asked participants to evaluate the workshop and all feedbacks were highly positive with suggestion to keep this practice.

The lessons learned from the workshop were important for us. We have found useful workshops orientated on delivering multidisciplinary care for patients both to the patient and to the doctors.

1. *Tingulstad S, Skjeldestad FE, Hagen B. The effect of centralization of primary surgery on survival in ovarian cancer patients. Obstet Gynecol. 2003 Sep;102(3):499-505. PMID: 12962932*
2. *Nurgaziev K, Seitkazina G, Baipeisov D, Seisembayeva G, Azhmagambetova A. Indicators of Oncological Service in Kazakhstan for 2011 (Statistical materials). Almaty, 2012.*