# Metastatic squamous cell carcinoma of the cervix: complete response under maintenance strategy with bevacizumab

# F. Lai-Tiong

Oncology Unit Gard Cancer Institute, Nîmes (France)

#### **Summary**

Cervical carcinoma is a common cancer. Metastatic disease will develop in 15% to 61% percent women, usually within the first two years of completing treatment. We present a case of a 56-year-old patient with a Stage IIIB carcinoma of the cervix, treated with chemoradiation, brachytherapy and surgery. Nine months after completion of primary treatment, she presented with latero-aortic metastatic adenomegalies. She received six courses of chemotherapy carboplatin+paclitaxel+bevacizumab, followed by maintenance by bevacizumab. After ten months of bevacizumab and three years after the diagnosis, the patient is alive, without further evidence of disease.

Key words: Cervical cancer; Cervix; Maintenance strategy; Bevacizumab.

### Introduction

Cervical cancer is the third most common cancer in women worldwide. The prognosis of advanced, recurrent or metastatic cervical cancer remains poor. Several chemotherapy regimens have some activity in advanced cervical cancers. However the prognosis of such cancers still remains poor. The development of targeted therapies involved in tumorigenesis may lead to other major advances.

The author reports the case of a 56-year-old woman treated for a 75-mm, Stage IIIB cervical squamous cell carcinoma, always alive and free from relapse at nine months of bevacizumab maintenance for metastasis.

## **Case Report**

The author reports the case of a 56-year-old Caucasian woman treated for high blood pressure for several years. She was a heavy smoker. She presented for post-menopausal bleedings. Biopsy cores revealed a 75-mm moderately differentiated squamous cell carcinoma of the cervix, reaching the isthmus and parameters, associated with bilateral pelvic adenomegalies. The tumor reached the upper third of the vagina and was a FIGO IIIB tumor. Positron emission tomography scan showed moderate hypermetabolism on para-aortic lymph nodes. The squamous cell carcinoma marker was at 2.3  $\mu$ g/l (normal range < 1.5). Para-aortic lymph nodes removal did not reveal any metastatic invasion out of 12 nodes.

The patient received concomitant chemoradiation therapy: five courses of cisplatin + 45 gray on the pelvis, associated with 5.4 gray on the cervix. The treatment was completed by brachytherapy: 9.8 gray. The patient then underwent surgery by colpohysterectomy, lymphadenectomy, and surgery of a part of the vagina. No residual lesion was found. The lesion was classified as ypT0N0. Fifteen months later the patient presented with left

uretero-hydronephrosis due to relapse of the cancer in latero-aortic lymph nodes. Biopsy was positive for metastases. Left nephrostomy was decided, then the patient began first-line metastatic chemotherapy by paclitaxel+carboplatin+bevacizumab. The patient received six courses of chemotherapy. She obtained complete response, and then followed bevacizumab in maintenance. At nine months of only bevacizumab therapy, the patient always is alive and in complete response. Squamous cell carcinoma marker was at 0.6  $\mu g/l$ . She reports no side-effects of bevacizumab.

### Discussion

The prognosis for women with advanced or metastatic cervical cancer is poor [1]. For the vast majority of patients with recurrent or metastatic disease, chemotherapy represents the only treatment option. Several chemotherapy agents have activity in cervical cancer. Cisplatin has been considered the most active drug [2].

Vascular endothelial growth factor (VEGF) is a factor that promotes angiogenesis, and a mediator of disease progression in cervical cancer.

Since 2006, studies haves showed that bevacizumab in association with chemotherapy was highly active in advanced cervical cancer [3]. It is a humanized anti-VEGF monoclonal antibody that demonstrated efficacy, with an improvement of 3.7 months in median overall survival. Side-effects reported with bevacizumab include: hypertension, thromboembolic events, and gastro-intestinal fistula. The present patient did not experience any of such side-effects.

F. Lai-Tiong 829

#### **Conclusions**

The author reported a case of a long surviving patient treated with bevacizumab for a metastatic cervical cancer. Bevacizumab use is safe and benefit.

#### References

- [1] Siegel R., Ma J., Zou Z., Jemal A.: "Cancer statistics, 2014". CA Cancer J. Clin., 2014, 64, 9.
- [2] Thigpen T., Shingleton H., Homesley H., Lagasse L., Blessing J.: "Cis-platinum in treatment of advanced or recurrent squamous cell carcinoma of cervix: a phase II study of the Gynecologic Oncology Group". Cancer, 1981, 48, 899.

[3] Wright J.D., Viviano D., Powel M.A., Gibb R.K., Mutch D.G., Grigsby P.W., Rader J.S.: "Bevacizumab combination therapy in heavily pretreated, recurrent cervical cancer". *Gynecol. Oncol.*, 2006, 103, 489.

Corresponding Author:
F. LAI-TIONG, M.D.
Oncology Unit Gard Cancer Institute
Rue du Professeur Henri Pujol
30900, Nîmes (France)
e-mail: florencelt@hotmail.fr