

**Background:** Abiraterone acetate (AA) is approved by FDA as second line treatment for patients (pts) with CRPC that experience disease progression after first line docetaxel chemotherapy. AA is a potent inhibitor of both 17 $\alpha$ -hydroxylase and 17,20-lyase (CYP17) activity. This inhibition may produce an increase in the concentrations of steroids synthesized upstream of the CYP17, with consequent adverse effects as hypokalemia, fluid retention and hypertension. **Patients and Methods:** Since November 2011, 28 pts with CRPC treated at IRCCS of Candiolo received AA plus prednisone (5 mg twice daily). Pts had undergone previous treatment with one or more lines of chemotherapy, in particular 89.3% of pts (25/28) had been treated with docetaxel (schedule 75 mg/m<sup>2</sup> 1/21), 35.7% of pts (10/28) received two lines of chemotherapy (docetaxel followed by mitoxantrone), 10.7% of pts (3/28) underwent chemotherapy with docetaxel with weekly schedule, one patient was treated with two lines of docetaxel, and one patient with a rechallenged of docetaxel after previous docetaxel and mitoxantrone chemotherapies. Twelve patients are still undergoing treatment with AA. We recorded all grades toxicity (according to NCI-CTACE v 4.0), with special regard to those related to the mineralocorticoid excess that may be induced by AA. **Results:** All pts included in the study had a good performance status (ECOG 0-1). Median age was 72.5 years (range 54-79) and 10 pts (35.7%) were older than 75 years. Hypertension was the most frequent adverse event and occurred in the totality of pts, though it was not worsened by therapy with AA and only 7 cases (25%) presented grade 3 toxicity. Hypokalemia occurred in 7.1% of pts (2/28), all cases were grade 1, without any indication for prompt correction. The incidence of fluid retention was 14.3% (4/28) and grade 1 or 2 peripheral oedema accounted for most of these events. There was no onset of cardiac arrhythmias. Other common toxicities included back pain (32.1%), fatigue (39.3%), arthralgia (21.4%), diarrhea (18%), vomiting (7.1%) and nausea (7.1%). Anemia occurred in 21% of patients and was of grade 3 in one case. **Conclusion:** Abiraterone acetate has a very favorable toxicity profile, with low incidence of grade 3 toxicities and is a feasible treatment even for patients with hypertension.

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#### SYSTEMATIC REVIEW OF PENILE METASTASES: ANALYSIS OF THE RESULTS OF THE LAST 10 YEARS

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**Background:** Penile metastasis is a relatively uncommon event with about 500 cases reported in the literature from 1961 to the present. The aim of our study was to conduct a systematic literature review of the past 10 years on this particular subject.

**Materials and Methods:** We conducted a systematic search in PubMed (<http://www.ncbi.nlm.nih.gov>), from January 2003 to April 2013, including the combination of the following terms: "penile/penis tumor", "penis/penile metastasis", "penile/penis cancer", "malignant priapism", limiting the search to articles in English. Embase and the Cochrane Library were also searched for the same keywords. **Results:** A systematic review identified 63 articles published between January 2003 and April 2013 for a total of 77 patients with an age range between 53 and 92 years and a mean follow-up of 1 year. 20 patients (26%) had metastasis of bladder origin, 19 (25.1%) prostatic, 15 (19.1%) colorectal, 7 (9.0%) pulmonary, 3 (3.9%) dermal, 3 (3.9%) esofagic, 2 (2.6%) renal, 2 (2.6%) secondary to lymphoma, 1 (1.3%) respectively from carcinoma of tongue, jaw, thyroid gland, seminal vesicles, glomangiosarcoma, leukemia myeloid lineage. In 4 cases (5.2%) penile metastasis was synchronous with the primary tumor. In the remaining 73, the average time between the onset of the primary tumor and the penile metastasis was 41 months (range: 4-60). In 35 patients (45.5%) metastasis was manifested as painful nodule in 31 (40.3%) with priapism, in 7 (9.1%) as a lump indolent, in 3 (3.8%) with hematuria, and 1 (1.3%) with ulceration. In agreement with Kendi *et al.* (Urol Nephrol, 2006), MRI proved to be the best diagnostic tool/stadiante. The primary therapeutic approach for the local control of the disease, has been surgical in 40 cases (51.9%), hormonal in 27 cases (35.1%), radiotherapy in 5 cases (6.5%) and chemotherapy in 5 (6.5%). The median survival after the diagnosis of penile secondariness was 10 months (range: 6-18 months). **Discussion:** Secondary lesions of the penis are relatively rare with a high prevalence of malignancy of bladder origin, prostate and colon/rectum. In agreement with Chaux *et al.* (Int J Surg Pathol 2011), penile metastasis is justified as genitourinary and colon/rectal cancers. No therapy was significantly higher from the prognostic point of view and the choice of approach should be considered by evaluating the performance status of the patient and the local extension of the lesion and systemic. **Conclusion:** The small number of

cases, the poor prognosis and lack of targeted therapeutic choices impose a registration of cases and a constant review of the literature in order to identify shared and effective therapeutic lines.

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#### INCIDENCE AND PROGNOSTIC IMPACT OF SKIN METASTASES FROM RENAL CELL CARCINOMA

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*Background:* Renal cell carcinoma (RCC) is the most common primary neoplasm of the kidney, accounting for 3-4% of all adult malignancies; about 25% of patients is found with metastatic disease at the time of diagnosis, while another 30% will develop distant metastases following the surgical treatment of a localized primary. The most common sites of metastases from RCC are lungs, lymph nodes, bone, adrenals, liver and brain, even though rarer metastatic sites are relatively common, as compared to other malignancies; according to the literature, metastases to the skin are observed in only 6% of all RCC cases. *Materials and Methods:* We reviewed our data base of 879 consecutive RCC patients evaluated at our Center between 2004 and 2013 (data cut-off at 31-12-2013), isolating 33 patients with skin metastases, thus confirming the prevalence reported in the literature (3.8% in our series). *Results:* Of the 33 patients with skin metastases collected, the vast majority (*i.e.*, 30 patients, 90.9%) developed metachronous skin metastases, with a median time from first RCC diagnosis to the development of skin metastases of 25.5 months (mean: 48.3, range: 1-272); only 3 patients (9.1%) had skin metastases that were synchronous to the primary. The most common sites of skin metastasis were the trunk (14 cases, 42.4%), the head (13 cases, 33.3%), the limbs (7 cases, 21.2%), the neck (1 case, 3%), the fingers (1 case, 3%) and the gluteus (1 case, 3%); 54% of the patients had thus more than one site of skin metastases. As far as the morphology of the lesions, the vast majority of patients had either nodular or fungoid lesions, with two patients only presenting with diffuse, shell-like, lesions. As far as the histology of the primary, a classical clear cell histology was evidenced in 28 cases (84.8%), while 2 other patients showed a papillary or a prevalent sarcomatoid histology, respectively; as far as the Fuhrman's grade of the primary, it was G3 or 4 in 17 cases (51.5% of the available graded tumors). In 13 cases (39.4%) a skin biopsy was performed to confirm the metastatic nature of the skin lesion; in the remaining cases, the diagnosis was clinical, mainly driven by the progressive growth of the lesions and by their high vascularization; notably, no cases of

discrepancy between the histology and the grading of the primary and those of the skin metastases were evidenced. One-, 3- and 5-year mortality rates in our patients with skin metastases were 78.8%, 90.9% and 96.9%, respectively, while median overall survival (calculated from the time of the development of the first skin metastases to death) was 5 months (mean: 12.9±24.2 SD, range: 1-128). *Discussion and Conclusion:* In Conclusion, skin metastases from RCC account for about 3% of all metastatic sites, are usually metachronous and related to a more aggressive tumor phenotype (at least in terms of grading), and are endowed by a dismaling poor prognosis.

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#### ADVANCED UROTHELIAL CANCER WITH NODAL DISEASE: THE IMPACT OF SURGERY AFTER CHEMOTHERAPY

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*Background:* Based on available information urothelial cancer patients with metastases would benefit from surgery. However, heterogeneity of surgery, treatment, and disease characteristics, as well as the limited sample size hamper the level of evidence. We aimed to analyze the contribution of post-chemotherapy (CT) lymphadenectomy just on survival outcomes in patients of our center. *Patients and Methods:* Between 1986 and 2012, 157 patients with locally advanced or metastatic urothelial cancer received first-line combination of methotrexate, vinblastine, doxorubicin, and cisplatin (MVAC). Of them, only patients experiencing at least a stable disease of subdiaphragmatic nodal disease/local recurrence were selected. For the sake of parsimony, the prognostic effect of singly taken covariates (surgery of tumor primary, site of nodal disease, extent of nodal sites [single vs. multiple]) upon survival was investigated using Cox proportional hazard regression models, with and without adjustment by treatment group (post-CT surgery vs. observation). *Results:* 59 patients were identified, 31 (52.5%) had regional nodes and 28 (47.5%) had metastatic disease. 42 (71.2%) had multiple nodal sites, 15 pts (25.4%) had an upper tract tumor primary, 24 (40.7%) had received major surgery. Twenty-eight pts underwent post-chemotherapy pelvic (N=14) or retroperitoneal lymphadenectomy (N=14) after achieving a complete response (CR, N=7) or a partial response-stable disease (PR+SD, N=21). 8/28 pts (28.6%) achieved a pathologic-CR. Median follow up was 88 months (IQR: 24-211). Median progression-