Clinical studies

P 18: Epidemiological and clinical characteristics of metastatic breast cancer in the east Morocco

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Background: Breast cancer is one of the most common malignancies among women. There is no gold standard treatment for metastatic breast cancer (MBC). The aim of this study was to review our experience on treating MBC. **Patients and Methods:** A retrospective study was conducted from 2009 to 2013 in our department. Eligible patients had MBC. We report the epidemiological, diagnostic, therapeutic and evolutionary characteristics of these patients. **Results:** 200 patients were included. The average age of these patients was 48 years old (23–84). The tumor was classified T3–T4 in 64% of cases with lymph node involvement in 49% of cases. The breast cancer was ductal histologic and undifferentiated type in 94% and 40% of cases respectively. The expression of HR was noted in 71% of cases while HER2 was over expressed in 20% of cases. The disease was metastatic at diagnosis in 86% of cases. Overall, the most common sites of metastasis were the bone, the lung, the liver, the pleura and the brain respectively. The chemotherapy was given as a first line in 60% of cases. Endocrine therapy was given as consolidation in 24% of cases. Trastuzumab was given in 17% of cases. A tumor control of metastatic disease was noted in 58% of cases. The mastectomy was done in 10% of cases. After a median follow up of 19 months, the median of PFS and OS were 10 months and 16 months respectively. **Conclusion:** In Morocco, MBC is often immediately metastatic at diagnosis with poor prognosis. However, the using of the new drugs of chemotherapy, target therapies and locoregional treatments had improve prognosis of this disease.

19: Risk factors of breast cancer: Prospective study about 135 cases

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Introduction: Breast cancer is one of the most public health problem. The identification of genetic, environmental and lifestyle factors

leading to the development of breast cancer will omprove the prevention of the breast cancer. The goal of this prospective study is to evaluate the risk factors for breast cancer in Moroccan women. **Materials and Methods:** This study is a prospective study of 135 women between January 2014 and April 2014, seen at the radiotherapy department of the national institute of oncology of Morocco. **Results:** The number of patients was 135 with a mean age of 47 years (25–72). 28.14% of patients had begins menstruation before 12 years and 39% were menopausal after 50 years. The oral contraceptive was taken by 56% of our patients. The average duration of its consumption was 8.75 years. One patient in our study had hormone replacement therapy for 3 months. 78% of our patients had children with an average number of childbirth of 4. The average age of first pregnancy was 23 years. 88.5 % among all patients who have children did breastfeeding during 14 months in average. 28% of womens had a first-degree relatives affected with breast cancer. Three patients had benign breast disease before the diagnosis of their cancer. Mean of BMI was 28 and only 27% of patients have a regular physical activity with at least a 30 min/day 3 times/week 2 patients had a history as occasional smoking and no patient had alcohol consumption. **Conclusion:** Our study confirms that breast cancer is a multifactorial disease. An identification of risk factors on which it is possible to act, and a better knowledge of the biological mechanisms involved should facilitate the implementation of effective prevention strategies.

P 20: Factors linked to late diagnosis in breast cancer: Experience of CHU Mohammed VI Marrakech

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Breast cancer is the leading female cancer in terms of incidence and mortality. In Morocco, it is the leading cancer in women before the cervical. It is a public health problem. Its prognosis is related to the stage at which the diagnosis is made. This is a disease whose diagnostic tools are developped nowadays, ranging from early detection to set evidence of subclinical lesions, which significantly improves prognosis in developed countries. **Objective:** The work that we present aims to identify in our daily practice, the factors that lead patients to consult at late stages. **Patients and Methods:** A retrospective study was conducted from January 2012 to January 2013 including 130 patients with a breast cancer in the oncology radiotherapy department CHU Mohammed VI Marrakech. A questionnaire was created and filled according to the medical files of the patients. **Results:** Thus 63.07% of patient sought for care above 6 months with T4 lesions classified in 27.69%, and metastatic tumors in 13 84%. Factors found during interview were the lack of financial means (40%), distance from health facilities in 23%, cultural habits with first intent traditional treatment (20%), and inadequate therapeutic management 7%. Yet, when comparing each of these factors to the delay, no significant link was found. **Conclusion:** In our practice, it is the combination of the triad ignorance, poverty and sociocultural habits which constitute the essential factor in the delayed diagnosis of breast cancer.

Key words: Cancer, breast, late diagnosis

P 21: Metastatic breast cancer in elderly women: Epidemiologic study and treatment results of Fez Institute

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Introduction: Breast cancer is the most common malignancy in women and its incidence increases with age. The aim of this study was to review our experience on treating metastatic breast cancer (MBC) in elderly women. **Patients and Methods:** A retrospective study was conducted from 2009 to 2013 in our department. We included all older women with age ≥65 years old treated for MBC. We report the epidemiological, diagnostic, therapeutic and evolutionary characteristics of MBC of these patients. **Results:** Fifty patients were included. The average age of these patients was 72 years old [67–84]. 28% of cases had co morbidity .The tumor was classified T4 with lymph node involvement in 40% and 62% of cases respectively. The disease was metastatic at diagnosis in 80% of cases. Overall, the most common sites of metastasis were the bone, lung, liver, pleura and the brain respectively. The breast cancer was ductal histologic and undifferentiated type in 90% and 40% of cases respectively. The expression of HR was noted in 90 % of cases while HER2 over expressed in 30% of cases. The chemotherapy was given as a first line in 72% of cases. Trastuzumab was given in 20% of cases. Endocrine therapy was given on consolidation after response to chemotherapy in 40% of cases. After a median follow up of 19 months, the median of PFS and OS were 7 months and 11 months respectively. **Conclusion:** MBC in elderly women is frequent. We highlight the interest screening guidelines in place for these patients who had preferences, psychosocial status and chemotherapy tolerance different from the young women.

P 22: Epidemiology and prognosis of breast cancer in young women

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Background: Breast cancer is the most common malignancy in women. It is rising among the younger who higher morbidity and mortality have compared to older women. The aim of this study is to review our experience on treating metastatic breast cancer (MBC) in younger patients. **Patients and Methods:** A retrospective study was conducted from 2009 to 2013 in our department. We included all young women with age under 40 years old treated for MBC. We report the epidemiological, diagnostic, therapeutic and evolutionary characteristics of these patients. **Results:** 60 patients were included. The average age of these patients was 36 year-old [23–40]. 10% of patients had a family history of breast cancer. The tumor was classified T3–T4 in 80% of cases with lymph node involvement in 50% of cases. The disease was metastatic at diagnosis in 80% of cases. Overall, the most common sites of metastasis were the bone, the liver, the pleura and the brain respectively. The breast cancer was ductal histologic and undifferentiated type in 90% and 60% of cases respectively. The expression of HR was noted in 50% of cases. HER2 was over expressed in 33% of cases. Chemotherapy was given as a first line in 83% of cases with sequential regimen in 60% of cases. Endocrine therapy was given as consolidation in 30% of cases. Trastuzumab was received in 16.7% of patients. After a median follow up of 19 months, the median of PFS and OS were 8 months and 12 months respectively. **Conclusion:** Our retrospective study confirms the aggressiveness of MBC in young women. We highlight the interest of screening guidelines in place for these younger.

P 23: Obesity and breast cancer prognosis

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Background: A clear association between obesity and breast cancer (BC) risk seems to have been established and investigating explanatory hypotheses for the relationship continue to appear regularly. However, the prognosis impact of obesity in BC is not well illustrated. **Patients and Methods:** A retrospective study was conducted from 2009 to 2013 in our department. Eligible patients had localized BC and were devised into two groups according their *body mass index (*BMI) at diagnosis (Group 1 = obese patients with BMI ≥30 Kg/m2 and group 2 = no obese with BMI <30 Kg/m^2). Kaplan–Meier method was used to perform analysis of survival from these groups and the log rank test for comparing theses analysis. **Results:** 150 patients were included. The average age of patients was 46 years (35–57). The BC was ductal histologic and undifferentiated type in 95% and 40% of cases respectively. The expression of HR was noted in 90 % of cases while HER2 over expressed in 30% of cases. The disease is classified as stage II in 59.8% of cases versus 30.2% stage III. The average BMI of patients at diagnosis was 27.77 Kg/m^2 and 35.5% of patients were obese. The adjuvant treatment was given with endocrine therapy, radiotherapy and chemotherapy respectively. After a median follow up of 36 months, 19.8% of patients presented a relapse of BC .The median of PFS and OG were 44.71 months and 49.98 months respectively. We observed better PFS and OG in no obese patients when compared to obese patients with P = 0.01 and P = 0.07 respectively. **Conclusion:** Our study concluded that obesity seems to have an impact on survival in BC. This impact should be validated in prospective studies in order to integrate nutritional care in our daily practices to improve outcomes and prevent relapse.

P 24: Epidemiological, pathological, therapeutical and evolutionary approach of triple negative breast cancer patients: About 60 cases

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Introduction: Breast cancer is the most frequent and the second leading cause of cancer death worldwide. Breast cancers are a heterogeneous group with a wide tumor clinical, pathological, and molecular prognostic spectrum. Cancers with in the triple-negative (TN) group are defined by the absence of labeling immunohistochemistry estrogen receptor, progesterone and Human Epidermal Growth Factor Receptor 2 (HER2). **Objective:** The aim of our study is to investigate the epidemiological, clinical, histological aspects, the treatments and results of triple negative breast cancer. **Materials and Methods:** This is a retrospective study conducted in the Radiation Oncology Department of University Hospital Hassan II of Fez, over a period of 2 years from January 2012 to December 2013 with 60 cases treated for breast cancer rated triple negative at the molecular level. **Results:** There are 60 patients out of 486 (12, 34%) with triple negative cancer, with a mean age of 48.36 years. 6.6% of patients are with a family history of breast neoplasia. The average time between the symptoms and consultation was 12 months. A breast nodule was the main sign in all patients, associated with inflammatory signs in five cases. All cancers are histologically proven, cancer isductal in 68, 3% of cases .It was in 46.7% of cases of grade III Scarff-Bloom and Richardson (SBR), and 28.3% grade II. Nine patients underwent conservative treatment, while fifty-one patients underwent a mastectomy with lymphnode dissection. All patients received chemotherapy with neoadjuvant and adjuvant five cases in 55 cases. Adjuvant radiotherapy was performed in all patients. The evolution was marked by the appearance of brain metastases in three cases, and supraclavicular lymphnode metastasis included in one patient after a mean follow-up of 24 months. **Conclusion:** The triple negative breast cancers are a distinct entity from HR+ cancers and cancers HER2+, but they never the less represent a heterogeneous group. They are a challenge therapy. There are currently no molecules clearly targeting this entity, there is no codified treatment. New drugs and new clinical trials are necessary.

P 25: Neoadjuvant chemotherapy (AT50 vs. AC60) in breast cancer and outcomes

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Introduction: Locally advanced breast cancer forms required neoadjuvant chemotherapy to facilitate breast conserving surgery. The purpose of our study was to determine the impact of both chemotherapy protocols on the prognosis. **Patients and Methods:** This is a descriptive and analytical retrospective study from 2008 to 2010 in "Centre Mohammed VI pour le traitement des cancers" of University Hospital of Casablanca., We included patients with locally advanced breast cancer who received neoadjuvant chemotherapy. Other histological types were excluded. The capture and analysis of data was done using SPSS 20 and the calculation of survival rates was done by the Kaplan-Meier method and the log-rank test. **Results:** Included were 102 cases of breast carcinoma. The average age was 46.5 years (24–84 years). The sex ratio women/men was 5.4. Infiltrative ductal carcinoma represented 95.3%, 36.3% of tumors were classified SBRIII and 98.1 % for stage IIIb. The chemotherapy regimens were administered AT50 (53.9%) and AC60 (46.1%). Analysis of surgical specimens has noted that 48% of tumors were classified Grade 1 Knight or MT Sataloff, 13.8% Grade 2 or TB and 7.8% Grade 3 or TC. Depending on the status of N Sataloff, 50% of patients were classified NA. Overall survival was 96.4% with an average of 32.36 months followed. Disease-free survival was 94%. A difference in survival in favor of AT50 protocol (97.8%) compared to the AC60 (94.7%) protocol was noted (P = 0.8). **Conclusion:** Neoadjuvant chemotherapy was not higly used in our center. The results showed a good response of breast cancers to the chemotherapy without superiority between AT50 and AC60.

P 26: Chemotherapy induced ovarian failure after adjuvant treatment for early breast cancer: National Cancer Institute experience

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Introduction: Breast cancer is the most common cancer and the highest cause of cancer mortality in women worldwide), the second most common cause of cancer death in women, and the main cause of death in women ages 40–59. It is increasingly reported in young premenopausal women in Egypt. About 25% of all breast cancers are diagnosed in premenopausal women and about 15% occur in women under 45 years of age. Adjuvant chemotherapy improves survival; however, one of the most frequent therapy-related adverse events observed, is the consequence of ovarian failure in premenopausal patients. **Objective:** This study aim ,was to find the incidence of chemotherapy-induced ovarian failure (CIOF) and reversible amenorrhea in premenopausal breast cancer patients, after adjuvant chemotherapy, at National Cancer Institute (NCI), Cairo University, and to review the clinical consequences of ovarian failure specially amenorrhea and postmenopausal symptoms. **Patients and Methods:** This retrospective cross-sectional study, included all premenopausal breast cancer patients with early breast cancer with at least a minimum follow up of one year after last cycle of adjuvant chemotherapy, within a 6 month period, 100 female patients referred to Medical Oncology Clinic in National Cancer Institute from September, 2013 till Marche, 2014. Age at diagnosis from 20 till 54 years old. Evaluation of risk factors included: age, type, dose and schedule of chemotherapy, hormonal treatment, menarche, oral contraceptive pills intake, a clinical history of the patients' menstrual cycle was taken, along the course of the patients' breast cancer treatment. Timing of chemotherapy induced ovarian failure, duration of amenorrhea. Reversibility of amenorrhea, influence of additional hormonal treatment on the frequency menstruation. The primary endpoints of this study are to determine the incidence of CIOF and the reversible amenorrhea and the clinicopathological features of patients who developed amenorrhea. **Results:** The study included 100 Egyptian female patients. The mean age of the subjects was 45 years. Of the patients, 56 were amenorrheic at completion of study and 44 regained menstruations, on average after 8 (range 2–24) months post-chemotherapy. Risk factors associated with chemotherapy-induced ovarian failure (CIOF) were analyzed, only the patient age at diagnosis, was found to be statistically significantly associated with reversible chemotherapy-induced amenorrhea. Conclusion: This retrospective study found a high incidence of CIOF, with a relatively low rate of reversible amenorrhea. Analysis of patients clinicopathologic factors showed that, only the patient age has been shown to be an independent factor, statistically significantly associated with ovarian failure after chemotherapy. Advances in fertility preservation options are now available to prevent such a problem using biological interventions to reduce the impact of chemotherapy on ovarian reserves, e.g. with GnRH agonists, or removal and preservation of ovarian tissue/mature oocytes/embryos for fertility treatment after breast cancer treatment.

Key words: Amenorrhea, chemotherapy, ovarian failure

P 27: Cardiotoxicity of trastuzumab in adjuvant breast cancer: Observational study of 115 cases at the University Hospital Ibn Rushd

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Introduction: Trastuzumab is a recombinant humanized monoclonal antibody, can improve disease-free survival after chemotherapy for cancer localized HER2 positive breast cancer. However, there is a risk of cardiotoxicity; hence the need for cardiac assessment before and during treatment with trastuzumab. Cardiotoxicity is defined as a decrease in left ventricular ejection fraction (LVEF) $\geq 10\%$ and a reduction to $<50\%$. The purpose of this study was to retrospectively evaluate the incidence of cardiac dysfunction and characterize the natural history in the Moroccan population. **Patients and Methods:** Retrospective observational study of 115 patients, treated with Trastuzumab, between January 2010 and January 2011. Radiotherapy Department Oncology, University Hospital Ibn Rushd, Casablanca in Morocco. **Results:** The study included 115 patients with a mean age of 48 years. Mean LVEF prior trastuzumab was 65% and at the end of treatment 60%. Cardiotoxicity was recorded in 17% of patients, 53% completed treatment and permanent discontinuation of trastuzumab was decided in the remainder (8 patients) following an unresolved decreased LVEF. The analysis of risk factors showed that history of cardiovascular comorbidity in the group who experienced cardiotoxicity was statistically higher than the rest of our sample. **Conclusion:** Cardiotoxicity is a serious complication of treatment with trastuzumab, which requires careful patient selection and close monitoring.

P 28: Breast cancer in men: What are the features?

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Introduction: Breast cancer in men is an uncommon disease, accounting for approximately 1% of all breast cancer cases. The aim of our study is to investigate the epidemiological and clinical aspects, the pathological features and results of treatment of this rare entity in the Eastern Region of Morocco. **Materials and Methods:** This is a retrospective study conducted at the Oncology Center of Oujda between January 2006 and December 2013. We analyzed the clinical records of male patients with breast cancer. In each case, the following features were studied: age, family history, circumstances of discovery, histological and immunohistochemical data, treatment and the evolutionary profile. **Results:** 25 cases have been collected over this period (0.5% of all breast cancers). The average age of patients was 62,5ans. 4 patients had a family history of breast cancer (16% of cases). The nodule sub-nipple as circumstance of discovery was the most frequent (68%); 15 patients consulted beyond to 3 months (60%). Mammography $\pm$ ultrasound were performed in 19 patients (76%). After staging, five patients had metastatic disease (20%). Twenty-three patients underwent surgical treatment (92% of cases). It was a radical Halsted mastectomy for 19 patients (82.6%) and Patey for 4 patients (17.4%). The mean histological tumor size was 3.5cm. 65% were classified as pT1T2 and 35% pT3T4. The only histological type was invasive ductal carcinoma (100% of cases), grade II (SBR) in 95% of cases. 81% of patients had axillary lymph node involvement. Hormone receptors were positive in 88% and HER2 test negative in 83% of cases. 80% of patients with no metastatic disease had an adjuvant chemotherapy and 90% had an adjuvant radiotherapy and tamoxifen. After a mean of 60 months, 40% of patients with no metastatic disease were kept in control, 40% had a local $\pm$ metastatic recurrence after a mean of 33 months and 20% were lost to follow up. **Conclusion:** Breast cancer in men is rare. The histo-biological profile looks identical to breast cancer of women but locally advanced forms are more frequent. Surgical treatment is based on the Halsted radical mastectomy and adjuvant treatment is similar to that of the woman. The prognosis is related to molecular characteristics, early diagnosis and treatment in a multidisciplinary collaboration.

P 29: Primary breast lymphoma: A study of seven cases

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Background: Primary breast lymphoma (PBL) is an uncommon disease with poor clinical outcome. Breast lymphomas present less than 0.5% of malignant breast neoplasms and 2.2% of extra-nodal lymphomas. This study investigated the clinic-pathological features and optimal treatment of PBL. **Materials and Methods:** We report a retrospective study carried out at National Institute of Oncology in Rabat, over 10-year period (2002–2012). A total of seven cases with a diagnosis of NHL of the breast were enrolled. **Results:** Six of the patients were women and one a man, with ages ranging from 32 to 76. Four patients had stage IE and three stage IIE. All of the patients were classified with diffuse large B-cell lymphoma. Of seven patients, one received a mastectomy and three excision of the breast lesion. Axillary dissection was performed in three patients. Two patients received chemotherapy followed by radiotherapy, while four received chemotherapy alone. Complete remission (CR) following primary treatment for all patients with PBL except in two cases was obtained. In one patient, recurrence occurred. **Conclusion:** Primary malignant lymphoma of the breast appears to be a rare disease, and few clinico-pathological features of the disease have been discussed in prior studies. Our series contained a small sample size, but it is interesting because it included only DLBCL cases, one case of male breast lymphoma and one of bilateral breast lymphoma. No clear consensus concerning the therapy has emerged, although chemotherapy seems to be the more common choice, alone or in combination with other treatments. The choice of chemotherapy regimen and/or use of radiation therapy (RT) is based upon the histological subtype, disease extent and individual patient. The prognosis and effectiveness of individual treatments are generally extrapolated from therapy for other extra-nodal lymphomas.

P 30: Endometrial cancer about 70 cases

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Introduction: The endometrial cancer primarily affects the elderly and post menopausal women. It has been a renewed interest due to the increasing frequency and the detection of biological and genetic factors involved in its genesis. Through our study, we will clarify the epidemiological and histopathological features and treatment in a serie of 70 cases. **Materials and Methods:** A retrospective study of 70 patients treated for endometrial cancer in the Radiation Oncology Department of the Universitary Hospital Hassan II, over 2 years (2012–2013). **Results:** The average age was 51.97 ans (42–80 years), 87% (87%) were post menopausal. Fourteen patients had a personal medical history (two patients with breast cancer treated by tamoxifen, diabetes in seven patients, hypertension in five cases). Vaginal bleeding are the main sign. The ultrasound with CT scan was performed in all cases and 50% of patients underwent an MRI. The endometrial biopsy was performed in 30% of cases with a biopsy-specimen correlation in 90%. All patients were operated: By hysterectomy with bilateral ophorectomy in 50% of patients, by Wertheim in 12.5% of cases and subtotal hysterectomy in 7.5% of cases. The pelvic lymphnode dissection was performed in 77.5% of cases. Endometroid adencoarcinoma was the most common histologic type (80%). the myometrium was involved for more than 50% of its thickness in 57.5% of cases. This is according to the Figo staging in 2009: 32.5% of cancer stage IA, 42.5% for stage IB, 0.5% stage II and 10% stage IIIA. The grade 2 was the most common (45%) and grades 1 (32.5%) and 3 (7.5%). External radiotherapy combined with vaginal brachytherapy is performed in 47.5% of cases, adjuvant brachytherapy alone in 42.5% of patients and an exclusive external radiotherapy in 0.5% of patients. **Conclusion:** The cancer of the endometrium is the prerogative of elder and post menopausal women. Diagnosis is based on clinical and radiological findings and the need for histological confirmation. Endometrioid adenocarcinomas are the most common histological types in our serie and according to the literature data. The adjuvant irradiation in endometrial cancer provides locoregional disease control.

P 31: Synchronous carcinomas of endometrium and ovary: What form is it?

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Introduction: The simultaneous achievement of endometrial and ovarian cancer by a cancerous process is not a rare phenomenon. In the absence of molecular biology, it is a true diagnostic challenge: Is it a double primary or metastatic form? **Purpose of Our Work:** The objective of this study was to evaluate the prevalence of the association of synchronous carcinomas of the ovary and endometrium, the epidemiological, clinical, histological and evolving profiles. **Materials and Methods:** This is a retrospective study conducted at the Regional Oncology Center Hassan II between 2005 and 2012. We analyzed the clinical folders of patients with synchronous carcinoma of the ovary and endometrium in terms of epidemiological, clinical, histological and evolutionarily profiles. **Results:** 11 cases have been collected during this period (8% of ovarian cancers and 17% of the endometrium cancers). The average age of patients was 51 years. 46% of patients were nulliparous and 54% in pre menopause. The most frequent reason for consultation was the abdominal pelvic pain in 6 patients followed by spontaneous bleeding in five cases. Ten patients were treated by radical hysterectomy without adnexal consevation. The omentectomy was performed in eight patients. Four patients underwent a pelvic lymphadenectomy. Adjuvant chemotherapy was conducted in eight cases and adjuvant radiation in two cases. Pathological examination showed histological correlation of endometrial and ovarian tumors in 10 patients with a dominance of endometroid carcinoma. According to Scully and Ulbright criteria, five patients had endometrial cancer with metastasis to the ovary, five patients had ovarian cancer with metastasis to the endometrium and one patient had two independent primary tumors. At the end of treatment, nine patients were in good control. With a median follow of 60 months, one patient developed an isolated metastasis and three patients a pelvic recurrence and metastasis. **Conclusion:** Our study is limited by the small number of patients. However, it seems that women with synchronous carcinomas of endometrium and ovary had clinical (younger age, pre-menopausal status and nulliparity) and histological (dominance of endometroid type) characteristic suggesting that hormonal factors may explain the development of synchronous carcinomas of endometrium and ovary.

P 32: Cisplatin based chemotherapy in first line treatment of high risk gestational trophoblastic tumours: Experience of Medical Oncology Department of Hassan II University Hospital, Fez, Morocco

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Introduction: Gestational trophoblastic tumours (GTT) are a rare disease, but it is characterized by high chemo sensitivity. High risk GTT are defined by a FIGO score superior to 6, they are at high risk of developing drug resistance and so are very unlikely to be cured with single-agent chemotherapy. Consequently, several different multi-agent therapies have been developed. EMA/CO regimen (etoposide, methotrexate, and dactinomycin alternating with cyclophosphamide and vincristine) is the most studied in this situation in the first line. The objective of thid study is to evaluate the efficacy and the tolerance of cisplatin based chemotherapy in high risk gestational trophoblastic tumours in first line. **Methods:** It is a retrospective study of eight patients presenting a GTT admitted in the Medical Oncology Department of Hassan II University Hospital over the period 2009–2012. **Results:** The median age of patients was 32 years (range 19–44). The median of FIGO score was 7 (range 7–9). Metastatic sites were lung in four cases and liver in two cases. Six cases had a malignant invasive mole and two cases choriocarcinoma. A chemotherapy based on cisplatin 80 mg/m² at day 1, methotrexate 50 mg/m² at day 1 and etoposide 100 mg/m² at days 1, 2 and 3, a cycle every 3 weeks was administered in six cases. BEP regimen (bleomycin at day 1, 8 and 15, cisplatin 20 mg/m² at days 1 to 5 and etoposide at days 1 to 5, a cycle every 3 weeks) was administered in two cases. Two cycles of chemotherapy was administered after negativation of bHCG. A complete response defined by negativation of bHCG and disappearance of metastasis was obtained in all patients. A median of four cycles was administered (range 3 to 6). After a median follow up of one year no experience of recurrence was noted. Concerning tolerance, four patients had grade 2 vomiting and one patient grade 3 vomiting. Four patients had grade 3 and one patient experienced febrile neutropenia. No renal toxicity or Oto toxicity were noted. **Conclusion:** Cisplatin based chemotherapy in first line treatment of high risk gestational trophoblastic tumours appear effective but the toxicity was significant.

P 33: Histoprognostic factors in bladder cancer series of 156 cases

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Introduction: Bladder cancer is the second most common cancer of the genitourinary tract. The transitional cell carcinoma accounts for nearly 90% of all primary tumors of the bladder. Although the majority of patients have superficial tumors, 20% or 40% have invasive disease develops. The pathologist plays a crucial role in determining the histological type, as well as determining factors for a histoprognostic proper care of patients. **Objectives:** The purpose of this study is to provide an epidemiological overview of bladder cancer and to find an association between tumor grade and other histoprognostic factors. **Materials and Methods:** We conducted a retrospective study of 156 bladder tumor listed in the Laboratory of Pathology of CHU Hassan II Fez over a period of 6 years from January 2009 to 2014. **Results:** In this series the median age was 62 years with a sex ratio M/F = 8.7. Urothelial carcinoma was the most common histological type (87.8%), followed by squamous cell carcinoma (8.3%). 36.8% of urothelial carcinomas were classified as low grade and 63.2% in high grade according to WHO 2004. The tumor was superficial in 23.7%. It has been classified as pT1 in 22.4%, 36.2% in pT2, pT3 in 9.9% and 7.2% in pT4.In this series, 64.4% of patients over age 50 had high-grade tumors compared with 45% of patients younger than 50 years (P = 0.08). We found a significant association between sex and grade of the tumor. In fact, 85.7% of women had a high-grade tumor (P = 0.05). 85.6% of urothelial carcinomas were in localized stage, compared to 58% in other histological types (P = 0.01). This study showed a significant association between the grade and stage of the tumor. Indeed, 96% of low-grade tumors were in localized stage (P = 0.006). It was also noted a significant association between tumor grade and the presence of vascular emboli: 18.3% of high-grade tumors were associated with vascular emboli (P = 0.002). **Conclusion:** In conclusion, the presence of a high-grade tumor is strongly associated with factors of poor prognosis, such as advanced tumor stage and vascular emboli. Urothelial tumors of the bladder are far more common in men than in women buthey are more aggressive in women than in men.

P 34: Nonbilharzial squamous cell carcinoma of the bladder

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Introduction: Second to urothelial carcinoma, squamous cell carcinoma (SCC) is the most prevalent epithelial neoplasm of the bladder, accounting for an approximate 3–5% of bladder tumors in Western countries. We systematically reviewed our experience with squamous cell carcinoma of bladder within a period of 5 years in order to study epidemiological characteristics, treatment modalities and patient outcome. **Materials and Methods:** We performed a retrospective study of seven patients with SCC of the bladder treated at our Radiotherapy and Oncology Department from 2008 to 2012. **Results:** In our collective, a male predominance with a ratio of 2/1 was observed. The average age at diagnosis was 58 years. The average consultation time was 1-year. The reason for consultation was hematuria in all patients, associated in most cases with irritative signs as pollakiuries. All patients underwent cystoscopy with biopsy. All pure SCCs were muscle invasive carcinoma with a staging of at least T3. Radical cystectomy was treatment of choice in tree cases. Adjuvant treatment was conducted in the tree patients administering either postoperative local irradiation or chemotherapy (methotrexate/cisplatin, gemcitabine/ cisplatine). Two patients inoperable had received a combined radio-chemotherapy exclusive with three cycles of Cisplatin and pelvic irradiation of 60 Gy. The other two patients were very thirsty and had received palliative care. The median overall survival for patients with pure SCC was 7 months. **Conclusion:** Our data underline the individuality and poor prognosis of squamous cell cancerous lesions of the urinary tract. The histogenesis of pure SCC of the bladder is not conclusively defined. Further studies are needed in fundamental, histopathological and molecular research while clinicians should undertake combined efforts in order to optimize the treatment of patients with rare urological tumor entities.

P 35: Kidney cancer in adults: Series of 41 cases

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Introduction: Kidney cancer accounts for 2–3% of all adult cancers. It is more common in men than in women. The average age is 62 ans. The clear cell carcinoma is the most common histologic type. The most critical factors are histoprognostic TNM stage and Fuhrman grade. **Objectives:** The aim ofthis study is to give an overview on the epidemiology of kidney cancer in the region of Fez and clarify the different histoprognostic factors of this cancer. Then we will compare our results with those in the literature. **Materials and Methods:** A retrospective study of 41 cases of kidney cancer, listed in laboratory of pathology over a period of 4 years. **Results:** Of the 41 cases examined, we found 28 cases of clear cell carcinoma, 7 cases of carcinoma tubulopapillary, 5 cases of chromophobe carcinoma and one case of diffuse B-cell lymphoma grades. In this series the median age was 58 years, but it was found that age differs depending on the histological type. Indeed, the median age was 60 years for clear cell carcinoma, 46 years for chromophobe carcinoma and 42 years for carcinoma tubulopapillary. The tumor was always unilateral with a predominance of the left side (64.7%). It measured 10 cm on average, buff-yellow color in 63.2% and encapsulated in 66.7% of cases. Pathological examination revealed the presence of lymph node involvement in 20% of cases, invasion of perirenal fat in 22.7% of cases and vascular invasion in 9.1% of cases. The invasion of the adrenal gland were found in any case. As a result, 28.6% of tumors were classified as pT1, 38.1% in pT2 and pT3 in 33.3%. Foci of sarcomatous differentiation were noted in two cases. Fuhrman nuclear grade was noted in all patients: 4.3% of tumors were grade 1, 60.9% were grade 2, 30.4% were grade 3 and 4.3% in grade 4. 17.8% of kidney tumors were associated with other histological lesions: 14.2% were associated with lesions of chronic pyelonephritis and 3.5% with adrenal angiomyolipoma. This work has highlighted the existence of a significant association between the stage and the evolution of patients: 85.7% had advanced stages unfavorable changes (P = 0.008 by Fisher's exact test). Age also plays a role in the evolution of the patients. In fact, 64.3% of patients aged over 60 years had an unfavorable evolution, against 18.2% in patients less than 60 years (P = 0.02 significant). **Conclusion:** Kidney cancer in adults is a cancer with a poor prognosis whose pathologist plays a key role in the positive diagnosis and determination of histoprognostic factors necessary for proper care.

P 36: Prostate specific antigen in prostate cancer: How is it useful? Series of 132 cases

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Introduction: Prostate cancer is the most common cancer in men. The determination of prostate specific antigen (PSA) has opened the way for cancer screening and supervision after treatment. Adenocarcinoma is the most common histologic type (98%). Given the heterogeneity of this cancer, there is recourse to the Gleason score, which is the sum of the two most represented grades. **Objectives:** The purpose of this study is to establish an association between PSA and the various histoprognostic factors of this cancer (size, Gleason score, perineural invasion). **Materials and Methods:** This is a retrospective study of 132 prostate cancer listed in the laboratory of Pathology CHU Hassan II of Fez over a period of 5 years. **Results:** The age of our patients ranged from 41 to 100 years with an average of 70 years. The mean PSA was 120 ng/ml and the average size of prostate is 47.7 g. At histological examination, all cases were adenocarcinomas with the presence of perineural invasion in 25% of cases and vascular emboli in 1.5% of cases.The tumor was classified, according Gleason, as score 5 in 4.5% of cases, score 6 in 22% of cases, score 7 in 15.9% of cases, score 8 in 24.2% cases, score 9 in 25.8% of cases and score 10 in 7.6% of cases.In this study it was found that the Gleason score increases with the PSA. Indeed, a PSA level between 4 and 10 ng/ml corresponded to a Gleason score 6, a PSA level between 10 and 400 ng/ml corresponded Gleason 8 and PSA levels >400 ng/ml corresponded to score 9 Gleason. It has been shown that there is a significant association between age and PSA: 82.1% of patients aged over 60 years had a PSA >10 ng/ml (P = 0.001). It was also found that the PSA level increases proportionally with the size of the prostate: 69.2% of patients with a prostate volume >40 g had a PSA >10 ng/ml (P = 0.55). The perineural invasion were significantly more frequent in patients with a PSA >10 ng/ml (69.2%) and in patients with a Gleason score >7 (63.6%). **Conclusion:** The PSA assay plays a critical role in the detection of prostate cancer. This study showed that high levels of PSA are associated with factors of poor prognosis.

P 37: Laryngeal cancer: A retrospective analysis of 70 cases

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Introduction: Known as the apanage of men and directly linked to smoking, laryngeal cancer represent 1.2% of head and neck cancers. The aim of our work is to make a point on our practice and discuss it through the literature data. **Materials and Methods:** This is a retrospective study of 70 patients in the radiotherapy department CHU Hassan II of Fez between January 2012 and January 2014. **Results:** The average age of patients was 63.1 years (39–95 ans) with a male predominance of 93.4%, smoking has been implicated in 78.6% of cases, the concept of alcoholism was found in 11% of cases and 9.8% of patients are non-smokers. The average consultation time was 14 months (3 months–36 months). The symptoms were dysphonia in 95% of cases, dyspnea in 37.7% of cases with 44% requiring an emergency tracheostomy. All patients underwent direct laryngoscopy and CT scan of the larynx has been applied consistently in all our patients. 79% had a tumor classified T3–T4, 20% of lymph nodes classified N2–N3 and 5% were initially metastatic. Histologically squamous cell carcinoma is the most predominant 96% of cases (well differentiated in 77% of cases). Therapeutically total laryngectomy with neck dissection was performed in 32 patients followed by either adjuvant radiotherapy in 25 cas dose of 46 Gy in a conventional fractionation with or without a boost in case of positive lymphnode, either chemoradiation in seven cases. 38 patients received an organ preservation protocol with 15 patients receiving neoadjuvant chemotherapy, 16 patients with concomitant radiochemotherapy and 7 patients radiotherapy alone. 5% of patients had a palliative

treatment. With a mean of 12 months symptomatology is dominated by xerostomia and dysphonia in 75% of cases, 5% had local recurrence initially classified T4N0, 7% distant metastasis and 7% died. **Conclusion:** The predominance of locally advanced stages gives interest to a multidisciplinary care, early diagnosis and a serious fight against smoking and to avoid mutilating treatments. We believe that our results seem comparable to those in the literature.

P 38: Nasopharyngeal carcinoma in children: clinical and therapeutic results

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Objective of the Study: The aim of our study was to provide epidemiological and evolutionary profile of nasopharyngeal carcinoma in children under 15 years, as well as showing the experience of our service. **Patients and Methods:** Retrospective study on nine children with nasopharyngeal carcinoma, treated with radiotherapy-oncology at the University Hospital Ibn Rushd Casablanca, between 2004 and 2009. **Results:** The average age of patients was 11 years, the sex ratio was 1.6, the average consultation time was 4.3 months. Apart from a case of embryonal rhabdomyosarcoma, all tumors were undifferentiated nasopharyngeal carcinoma-type (UCNT). According to the classification of the American Joint Committee on Cancer had: T4in 45% and T3 in 55%. N0 11%, 22% N1, 11% N2 and N3 in 56%. One child was diagnosed with pulmonary metastases at diagnosis. Treatment consisted of induction chemotherapy based on adriamycin and cisplatin combination followed by concomitant chemo radiotherapy 66–70 GY conventional fractionation. We had two deaths during treatment, and the evolution was marked by a complete remission in 55%, an increase in 11%, only one local recurrence and metastasis in 11%. The evaluation of late complications of radiotherapy revealed xerostomia in all patients with sequelae hearing loss and nasal synechia in a single patient. **Conclusion:** Nasopharyngeal carcinoma in children is a very special form characterized by an aggressive character. Early diagnosis and appropriate technology can improve prognosis and reduce complications.

P 39: Colorectal cancer: Epidemiological, clinical and molecular profil in the region of Marrakech

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Summary: Colorectal cancer represents a major public health problem. It remains a leading cause of cancer deaths. Over the past decade, the therapeutic arsenal for this indication has been enriched by new molecules including anti epidermal growth factor receptor (anti-EGFR). Numerous studies have demonstrated the efficiency of the anti-EGFR in metastatic cancers in association or not with other molecules. Objective of this work is to study the epidemiological, clinical, KRAS status, therapeutic of colorectal cancers in the region of Marrakech. **Methods:** Our retrospective study done in the Oncology Department Mohammed VI University Hospital of Marrakech, spread over 1 year from January 2012 to January 2013. 40 cases of metastatic colorectal cancer were collected within the service during this period. **Results:** The average age of our patients was 57.12 years, with a peak frequency between 60 and 72 years and a male predominance of 59%. We identified 51.3% of rectal cancer and 48.7% of colon cancer. The clinical symptomatology was dominated by rectorragy. The adenocarcinoma was the most common histological type 94.9%. KRAS mutation was found positive in 4 patients 10.1%. All patients were metastatic at diagnosis, with liver metastases in 24 cases (60%), lung metastases in ten cases (25%) and metastases in both liver and lung in six cases. Systemic chemotherapy was performed in all patients with a mean of 46 months (ranges 6–90 months). Surgial treatment of liver metastases was performed in 10 patients 25%. 9 cases of cancer of the rectum received an ARC.We deplored six deaths. **Discussion and Conclusion:** Colorectal cancer remains a leading cause of cancer death. A quarter of colorectal cancers are metastatic at diagnosis. Recent studies have shown consistent and the interest of the prescription of new molecules including anti epidermal growth factor receptor (anti-EGFR) have demonstrated efficacy in the treatment of colorectal cancer metastases.

Key words: Colorectal cancer, epidermal growth factor receptor, KRAS

P 40: Non-surgical treatment of squamous cell carcinoma of the anal canal

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Introduction: Squamous cell cancer of the anal canal is a rare tumor with loco-regional evolution often slow, its management is multidisciplinary. **Methods:** This is a retrospective study conducted at the Oncology Centre in Casablanca, collects 42 cases of patients treated for anal canal cancer during the period from January 2005 to December 2008. The aim of our study was to evaluate our results in terms of management of squamous cell carcinoma of the anal canal. **Results:** The average age of our patients was 64 years with extremes ranging from 38 to 85 years. The average period of consultation was 10 months. All cases were confirmed by biopsy: it was squamous cell carcinoma in all cases. Patients were classified, with reference to the TNM classification - T1 in 2 cases, T2 in 20 cases, T3 in 10 cases and T4 in 10 cases, lymph nodes were found in 20 patients at initial examination (N2 in 12 cases and 8 cases in N3). The treatment consisted of radiotherapy alone in three patients, chemotherapy based platamine and 5-fluorouracile (for 3 to 4 cycles), followed by a combination radio-chemotherapy with weekly platamine in 22 patients, a combination radio-chemotherapy immediately in 15 patients and radiotherapy followed by brachytherapy in two patients. After a mean of 24 months, 24 patients in complete remission, 15 recurrences, 2 lost seen and 1 death. Patients who developed recurrence were treated by surgery in eight cases and second-line chemotherapy based cisplatine/5FU or capecitabine in seven cases, with stable disease in five patients and treatment failure in 10 patients.

P 41: Management of Ewing's sarcoma in University Hospital of Casablanca

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Introduction: Ewing sarcomas are rare tumors (3% of malignant tumors in children). Standardized management and multidisciplinary approach is carried in our context for a long time. The purpose of this study was to describe clinical profiles and therapeutic outcomes. **Patients and Methods:** This is a retrospective descriptive and analytical study conducted in the Oncology and Radiation Therapy Center of University Hospital of Casablanca from 2006 to 2010. Patients with histology and immuno-histo-chemistry confirming the diagnosis of Ewing's Sarcoma (ES) and whose file were assessable were included. Data were analyzed with SPSS 20. Univariate analysis focused on the socio-demographic and clinico-radiological. Survival was calculated by the Kaplan–Meier method and the log rank test (P ≤ 0.05). **Results:** 32 patients were included, mean age was18 years, sex ratio (M/F) 1.5. The tumor was mainly in bone (87.5%). The average tumor size was 10.6 cm. Two cases have been reported synchronous metastasis. The treatment combined respectively chemotherapy, surgery and radiotherapy in nine patients; chemotherapy and surgery were associated in seven patients, neoadjuvant and adjuvant chemotherapy combined radiotherapy were administrated in 12 patients; 4 patients received chemotherapy alone. The average follow-up was 44 months (median = 43.5 months), the average time recurrence was 22.9 months. Overall survival was 78% and disease-free survival was 56%. The overall survival was better (79.2 %) for chilhood group (age ≤ than 20 years) than adult group >20-year-old (75%). **Conclusion:** The management of Ewing's sarcoma is well conducted in our center. The outcomes that we obtained are encouraging to continue.

P 42: Descriptive study of osseous osteosarcoma of adult patients

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Introduction: Osseous osteosarcoma is the most frequent osseous malignant tumour. It is most frequent in teenager and in young adult. Few studies of osteosarcoma of adult were published and data with regard to this entity are unknown in our context. The purpose is to describe all the aspects of this pathology in this age and to evaluate the quality of the multidisciplinary care in our centre. **Materials and Methods:** We conducted a retrospective study of the patients reached by osseous osteosarcoma treated and followed in our centres between 2006 and 2012. Our criterion of exclusion was an age inferior to 18-years-old. Several variables were studied among which the age, the sex, the revealing signs, the histories, the geographical origin, the biopsy, the surgery, the chemotherapy and finally the radiotherapy. The data collection was made on Microsoft Excel. **Results:** We included 24 evaluable cases. The average age was of 29 years with range between 19 years and 70 years. The sex ratio was 1.6 for the men. The most frequent localisation was the left shin. All the patients received biopsy first. Nine case were metastatic. 50% of the case received surgery. Our average follow-up was 18 months. **Conclusion:** Osseous osteosarcoma of the adult is a less frequent entity. Poor prognosis in our country is due to the delay of diagnosis and of care. The expertise of the team and the establishment of a standard protocol allows to improve the rates of survival of these patients.

P 43: Magnetic resonance imaging of prostate cancer: Practical tools for radiologists and oncologists

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Objectives: Magnetic resonance (MR) imaging plays a pivotal role in assessment of prostate cancer. We review the currently available MR methodologies for the evaluation of prostate cancer in a practical and integrated clinical context, discuss and illustrate the recent advancements in the field. We also argue the advantages and limitations of current diagnostic MR imaging of the prostate. In addition, we develop an imaging algorithm for MR imaging protocol of the prostate cancer. **Methods:** Experience of our department and pictorial review of literature. **Results:** Prostate cancer is the most frequently diagnosed cancer in males. It's can be divided into detection, localization, and staging; accurate assessment is a prerequisite for optimal clinical management and therapy selection. Traditional prostate MR imaging has been based on morphologic imaging with standard T1-weighted and T2-weighted sequences, which has limited accuracy. Recent advances include additional functional and physiologic MR imaging techniques (diffusionweighted imaging, MR spectroscopy, and perfusion imaging), which allow extension of the obtainable information beyond anatomic assessment, and provides the highest accuracy in diagnosis and staging of prostate cancer. **Conclusion:** Owing to its exquisite soft-tissue contrast, MR imaging is well suited for assessment of the prostate. It's a rapidly evolving field, and the application of many new techniques to the evaluation of prostate cancer will continue to improve the diagnostic accuracy of prostate cancer.

P 44: Carcinoma-small cell lung: Eadiologic aspects (about 22 cases)

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Introduction: Lung small cell carcinoma is a neuroendocrine tumor, it is a very aggressive tumor characterized by its propensity for invasion and metastasis. The aim of our study is to describe the typical CT scan appearance of small cell lung carcinoma. **Patients and Methods:** This is a retrospective study of 22 patients with lung small cell carcinoma and explored by chest computed tomography (CT) with upper abdominal cuts. Our study was focused on the characteristics of the tumor process, the lymph nodes involvement (hilar and mediastinal), mediastinal structures invaded, lung parenchyma signs and parietal pleural extension. We also describe the secondary locations to abdominal floor. **Results:** The tumor processes were headquarters in 80.2% of cases. Their outlines were irregular in shape and lobed central in peripheral forms. The average number of mediastinal lymph node chains achieved was 2.4. Hilar or mediastinal lymph node was observed in 90%. Mediastinal structure most often invaded was the ipsilateral pulmonary artery (55.7%). Ventilation disorders, obstructive, were observed in 18% of patients presenting a central form. 54% of patients had extra-thoracic secondary locations at initial staging. **Conclusion:** The small lung carcinoma cells present in the majority of cases, such a proximal tumor; with mediastinal-pulmonary hilar extension. Chest CT allows determining the size of the tumor, its

location and mediastinal invasion .She also clarifies the contact with the vena cava, the heart chambers, especially the pulmonary arteries.

P 45: Vascular features of testicular tumours at Color Doppler US: Specific features for recognizing lymphoma

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Purpose: In testicular lymphoma, tumor cells grow infiltrating through the tubules and through the normal testicular vessels, and the normal vascular architecture of the testis is preserved. wether the macroscopic appearance is nodular or diffus. The aim of this study is to describe the grey-scale and Doppler findings in testicular lymphoma, and to evaluate whether identification at color Doppler ultrasound of testicular vessels with straight course crossing a mass in improving characterization of the lesion. **Materials and Methods:** A cohort of 21 patients with testicular mass underwent scrotal Doppler ultrasound within the period between June 2012 and May 2014. Color Doppler images were available were reexamined to assess the features of the lesion, either mass forming or diffuse, and presence of normal testicular vessels with straight course crossing the lesion. **Results:** Thirteen patients with pathologically-proven lymphoma were found, five patients were carrying another histological type and 3 patients in whom lymphoproliferative disease was suspected on clinical and US ground and pathology or clinical evolution showed non-neoplastic disease. Lymphoma patients age ranged 21–72 y (median: 64 y). Eight patients had primary disease and one had testicular involvement in sistemic disease. None had bilateral involvement. Patients with non neoplasic lesions (three patients) had proven non-specific inflammation (n = 1), granulomatous orchitis (n = 1) and tuberculosis (n = 1). Involvement of the testis was focal in six patients with lymphoma, diffuse in the others. Color Doppler US demonstrated normal testicular vessels with straight course within the tumor in the nine cases of lymphoma. **Conclusion:** In patients over 60 and/or with history of lymphoproliferative disease presenting with a testicular mass lymphoma must be considered; Demonstration of normal testicular vessels crossing the lesion is a useful adjunctive criterium to confirm the diagnosis. Inflammatory lesions may present the same imaging features as lymphoma. These criterias should be researched by the radiologist to predict eventually the kind of tumour as preoperative approach.