Objectives: The aim of this paper is to performed a retrospective descriptive study between the years 2009 and 2013 analyzing 24 patients treated for testicular cancer at a Urology department of Health Center Vranje, including in the analysis tumor incidence, the patient’s age, patient’s time before treatment, histological type and their typical characteristics, oncological treatment, tumor progression and mortality rate. There were 13 rights sided and 11 left sided tumors presented and all of them unilateral. The average age of the patients was 36 years old in the group of patients with seminoma, 28 years old with mixed tumors, 26 years old average with embryonal carcinoma. One patient presented himself with fibrous histiocytoma was 14 year old and one patient with laydig cell tumor was 65 years old in the time of diagnosis. Two patients who were diagnosed with testicular lymphoma were 69 year old in average. Histopathological findings revealed: 11 cases of seminoma, 5 cases of mixed cell tumors, 4 cases with embryonal carcinoma, 2 case with non Hodgkin’s lymphoma and one case of laydig cell tumor and one case of fibrous histiocytoma. The entire patient underwent standard chemo therapy with cisplatinum for testicular cancer. One of the patients with mixed tumor underwent RPLND (retroperitoneal lymph node dissection) but soon died after administration of chemotherapy – PEB (cisplatin, etoposide and bleomycin). All of the patient, except the four of them with who we lost contact and the one deceased are decease free and attend regular follow ups to this day.

Key words: testicular cancer, chemotherapy, metastases, nonseminomas, seminoma, radical orchietomy

INTRODUCTION

Testicular tumors are a rare malignant disease, counting for 1 to 2% of all male cancers. However, they are the most common malignancy in the younger generations. The incidence of testicular cancer in European is in average of 4.2/100,000, with mortality rates of 0.3/100,000, which seem to be increasing. Testicular cancer is a curable malignancy, with a 10-year relative survival rate of up to 95%. Because this cancer largely affects young men, a resultant lifetime exists for manifestation of the late effects of treatment, including new malignant neoplasm. There are many known risk factors to develop testicular cancer (previous contra lateral TGCT, family history, cryptorchidism, klinefelter syndrome, etc). International guidelines are available to facilitate correct diagnosis, treatment and follow-up. The authors in this paper intend to present the experience in managing testicular tumors over 4 years, at the Department of Urology in Health Center of Vranje, Serbia. We analyzed tumor incidence, the patient’s age, patient’s time before treatment, histological type and their typical characteristics, oncological treatment, tumor progression and mortality rate.

MATERIALS AND METHODS

From pathology department cancer database of our hospital, 24 testicular cancers were recorded between 2009 and 2013. All the patients identified were treated and followed in our center. All the files were analyzed, applying a protocol covering risk factors, presentation form, initial stage, surgical procedure, histology, concomitant treatment and response, time free of disease, relapse, salvage treatment whenever done. Staging was done using the TNM system. All the patients remained under surveillance in our center and latest medical visit of each one was recorded in current year (2014).
RESULTS

A total of 24 male patients were identified as having testicular germ cell tumors (TGCT) in the period of 2009.-2013. There were 13 rights sided and 11 left sided tumor presented. The average age of the patients was 36 years old in the group of patients with seminoma, 28 years old with mixed tumors, 26 years old average with embryonal carcinoma. One patient presented himself with fibrous histiocytoma was 14 year old and one patient with Laydig cell tumor was 65 years old in the time of diagnosis. Two patients who were diagnosed with testicular lymphoma were 69 year old in average.

In most of the cases patients presented with painless scrotal mass, four of the patients underwent examination after blunt force trauma to the scrotum and two patient who underwent surgery because of the testicular hematocoele were diagnosed with non Hodgkin’s lymphoma.

All of them except the two patient operated for the hematocoele underwent radical orchiectomy. Two conformation of the testicular radical surgery were confirmed with extempore biopsy. Hystopathological findings revealed: 11 cases of seminoma, 5 cases of mixed cell tumors, 4 cases with embryonal carcinoma, 2 case with non Hodgkin’s lymphoma and one case of Laydig cell tumor and one case of fibrous histiocytoma. The entire patient underwent standard chemo therapy with cis platinum for testicular cancer. The patient who presented himself with mixed tumor (yolk sack 80%, Ca embrionale 10%, seminoma 5%, and teratoma 5%) underwent retroperitoneal lymph node dissection due to the disease progression. PEB protocol chemotherapy was applied shortly after witch patient died.

All of the patient, except the four of them with who we lost contact, are decease free and attend regular follow ups to this day.

DISCUSSION

The good prognosis of patients with early stage disease is confirmed, with the outcome for some groups of patients being better than expected. Failure of patients with metastatic non-seminomatous germ-cell tumours to achieve a complete response to initial therapy is shown to be a poor prognostic indicator. RPLND represents a major part of the management of advanced TGCT undergoing inductive chemotherapy. Complete resection of all residual masses after primary chemotherapy is associated with better survival than current standards of care. World J Urol 2009;27(4):463-470.

BIBLIOGRAPHY