

# A Case of Metachronous Bilateral Testicular Seminoma with Retroperitoneal Recurrence

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## ABSTRACT

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**Objective:** To present a case of bilateral metachronous seminoma and examine the uncommon nature of the clinical presentation

**Methods:** A 35 year old male patient presented with a firm testicular swelling and on right orchidectomy showed evidence of classical seminoma. Three years ago he had presented with left testicular swelling and undergone left high inguinal orchidectomy with a pathological diagnosis of testicular seminoma. He had radiotherapy and chemotherapy immediately following the first orchidectomy.

**Results:** After the right orchidectomy the raised AFP was normalized and the patient is on followup and asymptomatic for three and half years. Recently he developed cough and chest symptoms and on evaluation showed enlarged mediastinal and retroperitoneal lymph nodes and raised serum markers. He was put back on cyclic chemotherapy and he has recovered.

**Conclusion:** Bilateral testicular tumours are rare and bilateral metachronous seminomas are even rarer.

**Keywords:** Bilateral seminoma, Metachronous, Testicular tumour

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## INTRODUCTION

We are reporting a case of metachronous bilateral testicular seminoma with delayed mediastinal and retroperitoneal recurrence three years following the second orchidectomy. Patient received chemotherapy for the same, with evident biochemical and radiological resolution.

## CASE

We are reporting a case of a 35 year old male who

presented with left testicular swelling and scrotal heaviness 7 years prior, with no other symptoms or signs. He underwent left high inguinal orchidectomy following CT abdomen and biochemical evaluation. Histopathology showed testicular seminoma. He then underwent 20 cycles of radiotherapy over the abdomen, followed by two cycles of chemotherapy. Patient was cured completely then, and was on regular follow up. Three years later, he presented with right testicular firmness and swelling. MRI showed no abdominal lymphadenopathy with large altered intensity right testicular mass. Right orchidectomy specimen proved

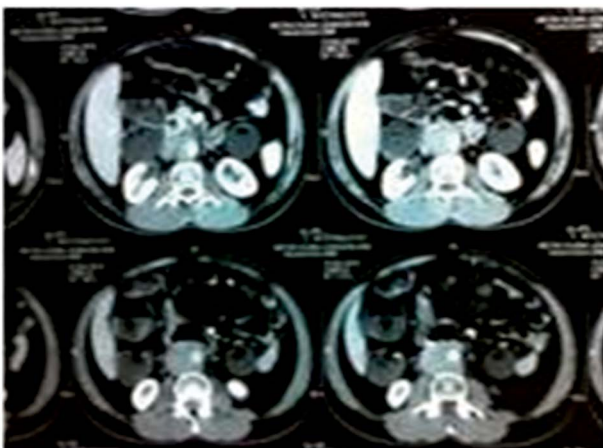


Figure 1. Showing retroperitoneal lymphadenopathy

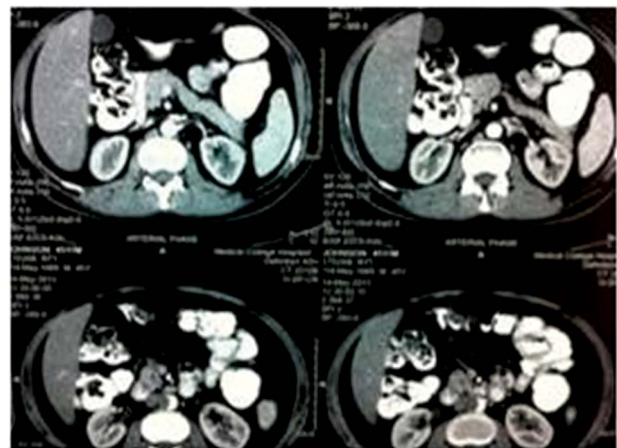


Figure 2. Showing resolving mass post treatment

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to be classical type of seminoma. Preoperatively raised AFP got normalised after orchidectomy, with a regular follow up then after. After three and a half year, patient developed dry cough for 3-4 months and took symptomatic treatment. On follow up visit, evaluation showed markedly raised B-HCG, GGT and LDH with normal AFP. CT abdomen and chest showed mediastinal and retroperitoneal lymphadenopathy with homogenous post-contrast enhancement. Patient received two cycles of BEP and four cycles of EP for the same. Post chemotherapy shows normal CT abdomen findings with normal tumour markers, except LDG, which shows half of pre-chemotherapy value at conclusion of the treatment.

## DISCUSSION

Testicular malignancy is the most common malignancy in the age group 20-35 years. Bilateral testicular tumours are rare.<sup>1</sup> Metachronous presentation of testicular malignancy points to the risk of malignancy developing in the second testes after a period of time. High inguinal orchidectomy is still the gold standard of treatment for testicular seminoma and testicular sparing surgery is more applicable for benign testicular tumours.<sup>2</sup> Bilateral synchronous testicular tumours are rare but among them seminoma is the commonest. Synchronous bilateral germ cell tumour of the testes is rarer but its association with bilateral cryptorchidism is even rarer.<sup>3</sup> This case shows an early detection of the contralateral side testicular mass since the patient was on regular followup.

A second testicular tumour can develop in the contralateral testes and its incidence among men followed up for 4-15 years after the first testicular cancer is in the range of 2-5%. The mean time to diagnosis is 6 years. Approximately 17% bilateral tumours develop synchronously and rest 83% metachronous. About 40-45% are seminoma and the rest are mixed.<sup>4,5,6</sup>

Seminomas are associated with more second tumours and the risk increases as followup increases. This risk increases in patients treated initially with radiotherapy alone. Metachronous testis tumour is defined as when the interval between the detection of the first and second testicular masses is over 6 months. The mean age of metachronous tumours is 28 years at the diagnosis of the first tumour and 35 years at the diagnosis of the second tumour.

## CONCLUSION

Bilateral seminoma of testes is a very rare presentation of this less commonly found malignancy. Statistically, second testicular primary cancer appears between 5 and 6 years, but recent reports suggest extension of this interval to longer periods after the first operation. Metachronous presentation with delayed recurrence in our case depicts the importance of regular and life-long follow up. An early diagnosis and prompt treatment can thus be delivered, achieving excellent disease control.

## END NOTE

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**Conflict of Interest:** None declared

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