A Testicular Cancer that was Thought to be an Inguino-Scrotal Hernia

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SUMMARY

We present a case of a young man with a 5-year history of testicular swelling which was initially thought to be inguinoscrotal hernia. Intra-operatively it was found to be a testicular tumour and histopathological examination confirmed a mixed germ cell tumour. He had an orchidectomy and later underwent chemotherapy. It is interesting to note that the patient had kept the tumour for 5 years with no evidence of distant metastasis at diagnosis. This is probably the longest presentation of a testicular tumour.

Scrotal swelling, testicular mixed germ cell tumour

INTRODUCTION

Testicular cancer is a relatively uncommon cancer in men. It has a high cure rate if detected early. Giant inguino-scrotal hernia, or inguinal hernia that reaches the mid-thigh, is also an uncommon finding in the western world. However it is still a common finding in Malaysia, although it is getting rarer nowadays. As the management of these two diseases are very different, they should not be mistaken for each other.

CASE REPORT

A 35-year-old man presented with 5 year history of right scrotal swelling. The swelling was huge and it reached down to his mid-thigh region causing him to have difficulty in walking. Over the years it has slowly increased in size and has always been irreducible. On examination there was a right scrotal swelling measuring 30x20 cm. It was firm, nontender and non-transilluminable. There were no scrotal skin changes and no lymphadenopathy. Abdominal examination was unremarkable. A diagnosis of right inquino-scrotal hernia was made and he was scheduled for right inguinal hernioplasty. There was no ultrasonography examination performed prior to the surgery. A right inguinal incision was made but intra-operatively the swelling was noted to be testicular in origin (Figure 1). There was no inguinal hernia. The wound was extended into the scrotum and right orchidectomy was done together with scrotal reconstruction. There was no breach in the tumour capsule intra-operatively. The mass weigh 14.6 kg. Patient was discharged well after one day.

On gross pathological examination, there was a huge grayish testicular mass measuring 30x21x11 cm. The mass

was fairly circumscribed and vascularized. Cut section showed encapsulated whitish soft friable mass with areas of necrosis. Microscopically the sections show mixed germ cell tumour consisting of seminoma (60%), yolk sac tumour (30%) and mature cystic teratoma (10%). Alpha feto protein and LDH values were 1210 ng/ml (<10 ng/ml) and 127 U/L (110-248 U/L), respectively. Beta HCG, however, was not done due unavailability of reagent. CT scan revealed enlarged lymph nodes at the right external iliac chain with no distant metastasis. He was referred to the oncologist and he underwent four cycles of chemotherapy (bleomycin, etoposide, platinum). He was well at 3 months post-operative follow up.

DISCUSSION

Testicular cancer occurs most commonly in the young and middle age men. It is a curable disease if detected early and managed accordingly. Risk factors for developing testicular cancer include a history of undescended testis, abnormal testicular development, Klinefelter's syndrome, previous testicular cancer and family history. Our patient did not have any of the risk factors.

Testicular tumour can be divided into germ cell and nongerm cell tumour. Germ cell tumours are further categorized into two: seminoma and non-seminoma. Non-seminomatous germ cell tumour that composed of more than once histologic patterns are called mixed germ cell tumour. Most of the patients present with painless enlarging testicular mass. Distant metastasis is also seen as part of presentation, especially in tumours with high risk histology, such as choriocarcinoma. The most common sites of metastasis are retroperitoneal lymph nodes, lungs, bones and brain. It is interesting to note that our patient had no distant metastasis even though he presented after five years of having the scrotal swelling. We attributed this to the fact that choriocarcinoma was not part of the histology and that the tumour he had was a very slow growing tumour.

Testicular cancers are characterized both by their rapid growth and sensitivity to chemotherapy or radiotherapy, depending on the histological subtype. The prognosis is excellent for the majority of patients, with a greater than 95% cure rate in limited stage disease. Delays in diagnosis affect the stage of disease at presentation and therefore the prognosis. According to Vasudev *et al*¹ the median time that patients took to seek medical attention from first noticing something wrong was 2.0 weeks. The longest presentation in

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Fig. 1: Large right testicular tumour which was initially mistakenly thought to be inguino-scrotal hernia.

their series was 2 years. A study of 217 cases of testis cancer in Ireland revealed a longer duration of symptoms (median 2.8 months, mean 10 months).² Thirty two percent of their patients waited at least 6 months before seeking medical advice. Our patient waited 5 years before he actually seek medical advice. As to why some patient waited long before seeking medical advice, Chappel *et al*³ found that men delayed because they did not recognize signs and symptoms; feared appearing weak, a hypochondriac, or lacking in masculinity; recalled past illness or painful examinations; were embarrassed; feared the consequences of treatment; or lacked time to consult their doctors. Our patient had a fear of treatment and only came to see us after much persuasion from the wife. The diagnosis of inguino-scrotal hernia was initially made for this patient as it was thought that the scrotal mass was unlikely to be cancerous due to the long-standing presentation. This case has shown us that we should not discard testicular cancer as a differential diagnosis of a scrotal swelling. Another lesson learned is that ultrasonography of the testis should have been done prior to the surgery. Shaw advocated that diagnostic ultrasound should be performed even if there is clinically evident tumour.⁴ Ultrasonography examination is inexpensive, noninvasive and can be used to explore the contralateral testis.

CONCLUSION

To the best of our knowledge this is the longest presentation of a testicular germ cell cancer. Long term follow up is necessary as delayed metastasis after many years of successful treatment have been reported.⁵ Ultrasonography examination of the testis is an important diagnostic tool especially in the case of a giant inguino-scrotal hernia.

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