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Case Report

Successful pregnancy after chemotherapy and surgery for an anterior abdominal wall desmoid tumor

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ABSTRACT

Desmoid tumors are said to be hormone dependant tumors and are common during or after pregnancy. This is a case of a young lady who successfully delivered after chemotherapy and surgery for an anterior abdominal wall desmoid tumor. This shows subsequent pregnancy is not a contraindication after treatment of desmoid tumor and there is no increased risk of local recurrence or new disease after pregnancy.

Keywords: Desmoids tumor, Pregnancy, Abdominal wall

INTRODUCTION

Desmoid tumor, a rare neoplasm is commonly seen in young females during or shortly after pregnancy.¹ Being a hormone dependent tumor, there is a risk of recurrence or second desmoid tumor in the subsequent pregnancy.² This is a case of a young lady who delivered a healthy child 15 months after completion of chemotherapy and surgery for an anterior abdominal wall desmoids tumor.

CASE REPORT

A 23 year lady presented with progressively increasing painless lump on left side of her abdomen since 10 months. There were no associated bowel symptoms. Her obstetric formula was P2L1D1. Her first child died suddenly after birth at home of unknown reason. Her second child was normal full term vaginally delivered and was one and half year old. There was no past history of abdominal surgery or trauma to the abdominal wall other than the pregnancy induced changes of abdominal wall. There was no significant past and family history.

On clinical examination, her general condition was good and Karnofsky performance status was 90%. There was a

12 x 8 cm non-tender, lobulated mass with restricted mobility and normal overlying skin in the left iliac region which was extending to left lumbar and hypogastric regions. Rest of the clinical examination and laboratory tests were normal. Abdominopelvic ultrasonography revealed a 9.9 x 8.7 x 6.7 cm well-defined lobulated heterogeneous echo textured, predominantly hypoechoic lesion with multiple calcific foci within in left iliac region and left side of the pelvis. It was abutting anterior abdominal wall and displacing iliac vessels posteriorly. Fine needle aspiration cytology revealed desmoid fibromatosis.

She was started on weekly injection Methotrexate 35 mg/m², Vinblastine 6 mg/m² and daily oral tamoxifen 40 mg/m². The response was clinically evaluated at every fourth week. Because of grade II haematological toxicity (CTCAE-v3) she did not received the chemotherapy for random four weeks. At the end of 29th week of treatment there was a partial response at the tumor site and was operable. Radiologically the size reduced to 8.8 x 6.3 x 3.6 cm. Wide local excision of the tumor was done. The histopathology report was desmoid fibromatosis (Figure 1) with tumor size of 8.5 x 5.5 x 3cm after multimodality treatment and R0 resection.

She was counselled for the primary disease and its hormonal dependency. After 15 months of completion of treatment she vaginally delivered a healthy male child. There was no evidence of recurrence or new lesion.

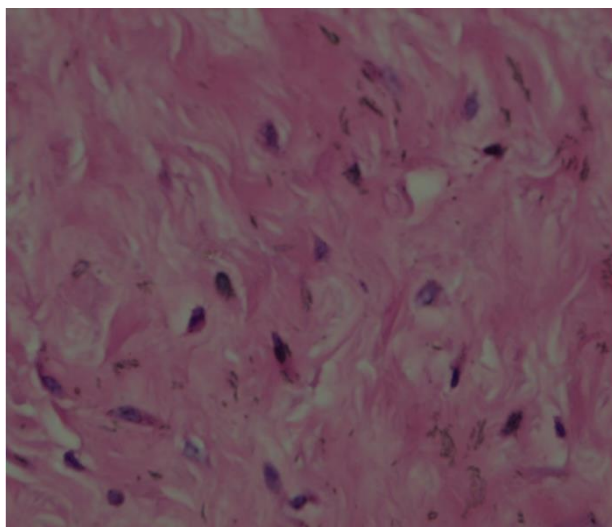


Figure 1: 400 fold magnification of surgical specimen showing few spindle cells with abundant collagen and no mitosis.

DISCUSSION

Desmoid tumors (DTs) are rare and account for 0.03% of all neoplasm and less than 3% of all soft tissue tumors. Etiological factors mentioned in the literature are genetic, hormonal and hereditary. Accordingly there are three types viz spontaneous, associated with Familial Adenomatous Polyposis and hereditary desmoid disease.³ DTs are commonly seen in females during and shortly after pregnancy. Though the reasons are unclear, hormonal and immune system changes occurring during pregnancy have been linked with it.⁴ Also, it is documented in the literature that DTs respond to antiestrogen treatment. The treatment of choice is surgery. Large inoperable tumors can be treated with preoperative radiotherapy and systemic therapy like chemotherapy, non-steroidal anti-inflammatory drugs and hormone therapy.

William et al studied ten cases of pregnancy associated DTs. He found most common site as abdominal

musculature and most likely factors associated were hormonal changes occurring during pregnancy.⁴ Jeffrey et al described two cases of DTs with successful pregnancy 24 and 13 months after surgery.²

Literature review showed successful pregnancy after surgery as primary treatment for DTs. Our patient was treated with both chemotherapy and surgery. She delivered successfully at 15 month after treatment completion with no evidence of recurrence or second tumor.

Thus, though DTs are hormone dependant tumors, subsequent pregnancy is not a contraindication after treatment of DTs and also, there is no increased risk of local recurrence or new disease after pregnancy.

CONCLUSION

Desmoid tumors are hormone dependant tumors. Successful pregnancy can be achieved even after treatment with chemotherapy and surgery without added risk of recurrence or new disease.

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