Desmoids tumours of the abdomen are uncommon benign tumours with varied presentations. The diagnosis is frequently established by histological examination. These tumours are known to recur even after surgical excision. A case report of a 41-year-old female with a painless abdominal mass has been presented. She was found to have a firm, non-tender, immobile, and regular mass in the left lumbar region of the abdominal wall. Her CT scan and FNAC revealed a benign-natured lesion. The patient’s mass was completely excised and the histology confirmed desmoids tumour of the abdominal wall. The rarity of such lesions warrants that the treating physicians should have a high degree of suspicion while managing abdominal masses of a questionable nature.

**ABSTRACT**
Desmoids tumours of the abdomen are uncommon benign tumours with varied presentations. The diagnosis is frequently established by histological examination. These tumours are known to recur even after surgical excision. A case report of a 41-year-old female with a painless abdominal mass has been presented. She was found to have a firm, non-tender, immobile, and regular mass in the left lumbar region of the abdominal wall. Her CT scan and FNAC revealed a benign-natured lesion. The patient’s mass was completely excised and the histology confirmed desmoids tumour of the abdominal wall. The rarity of such lesions warrants that the treating physicians should have a high degree of suspicion while managing abdominal masses of a questionable nature.

**Key Words:** Surgery, Abdomen, Growth

**INTRODUCTION**
Desmoids tumour, also known as aggressive fibromatosis, is a rare soft tissue neoplasm which is caused by a monoclonal proliferation which arises in musculoaponeurotic structures [1]. Although fibromatosis is thought to be a benign lesion that lacks metastatic potential, it can be characterized by a locally aggressive and infiltrating growth pattern with a high propensity towards local recurrence [2, 3]. Histologically, the tumour consists of a bland-appearing proliferation of spindle cells. This uncommon disease accounts for less than 3% of the soft tissue tumours, or 0.03% of all the neoplasms, and it is more common in women. The peak incidence is in the age range of 25-35 years [4], and most of the cases occur between puberty and 40 years of age [5].

Abdominal desmoids tumours occur sporadically or in association with rare familial syndromes such as familial adenomatous polyposis coli [6]. This case report presents a rare case of desmoids tumour of the abdominal wall in a young female.

**CASE REPORT**
A 41-year-old female presented to the surgical clinic of Ohud Hospital, Al Madina Al Munawara Kingdom of Saudi Arabia, with the complaint of a painless left sided abdominal mass of 6 months duration. The patient denied any systemic illness, familial disease or trauma in the region. She was found to have normal vital signs. On examination of her abdomen, a firm, globular, non-mobile, non-tender mass was found in the left lumbar region, which measured 8 x 8 cm [Table/Fig-1]. All the baseline blood results were normal. Her CT scan revealed a homogenous, benign looking mass in the left lumbar region with local infiltrations to the surrounding abdominal wall muscles [Table/Fig-2]. The mass was reported to be superficial to the peritoneum, lying among the layers of the abdominal wall muscles. The FNAC of the mass showed few spindle cells but they remained essentially equivocal. The patient was subjected to exploration of the mass under general anaesthesia through a left oblique incision. The mass was found to infiltrate the peritoneum which was opened for a clear resection of the lesion [Table/Fig-3]. The tumour was completely excised with a safety margin of 2 cm all around [Table/Fig-4]. The abdominal wall defect was approximated with a layered closure after placing a drain. The histological 9 report confirmed a desmoids tumour which was composed of scattered spindle cells and fibroblasts.
and Cytology (FNAC). There is no striking radiological feature of the desmoid tumours which can easily clinch the diagnosis.

Regardless of the site, an aggressive wide local excision of the desmoid tumours has been popularly advocated in the literature [9, 10]. The factors that support this aggressive surgical approach, include the potential of fibromatosis in displaying a locally infiltrating growth pattern into the surrounding structures, the resultant high propensity for local recurrence when the tumours are incompletely excised, and the lack of convincing evidence for a proven beneficial role of radiation therapy, chemotherapy, or a combination of therapies [11, 12]. However, other authors have been less enthusiastic and have given guarded support to an aggressive surgical approach [13, 14]. The factors that these authors stress are the increased potential for a less than optimal cosmetic outcome, the risk of loss of function, rare reported cases of spontaneous regression of fibromatosis, and a high incidence of recurrence after an apparent complete excision with negative surgical margins.

In a small series of seven cases, one patient developed recurrent disease that was surgically resected and the patient remained disease-free during a 6-year follow-up [15]. Also, in another study of 23 cases, the local recurrence rate of 13% was recorded after a median follow-up of 30 months [16]. In a small series of four patients with desmoids tumours of the abdominal wall, who underwent surgical excision after neoadjuvant therapy with preoperative doxorubicin and radiotherapy, no long-term recurrences were reported after a median follow-up of 6 years [17]. Most of the recurrences are observed within 3 years, and nearly all were observed by 6 years [18]. Age may affect the recurrence rate; although the information is unclear, it may be more likely in younger patients with extra-abdominal desmoids tumours [18]. Bertani et al [7] have stressed that a disease-free resection margin was the most crucial factor for reducing the recurrence rate. Moreover, a one-stage treatment with immediate mesh reconstruction was cost-effective, and it increased the chances of a definite cure. This concluded that the mesh placement has to be performed in the presence of microscopically negative margins, and for this reason, they recommended routine frozen sections of the specimen.

Reconstruction of the large abdominal wall defects is complicated and demanding [19]. Abdominal wall reconstruction can be achieved by direct repair by suturing, and by the use of synthetic material (mesh) or myocutaneous flaps, in case of extensive defects. In addition to the surgical option, there are claims which support the efficacy of radiation therapy. However, it is rarely used for abdominal wall and intra-abdominal disease because of the potential risk of radiation enteritis [20].

To conclude, abdominal wall desmoids tumours are rare and they necessitate wide surgical excision for a definite cure. A close follow-up is warranted due to the high recurrence rate.

REFERENCES


