

## Dermatofibrosarcoma protuberans—a rare neoplasm

Awaji Qasim Al-Naami<sup>1</sup>, Liaqat Ali Khan<sup>1</sup>, Khadija Amin<sup>1</sup>, Abdu-rahman Mohammad Al-Naami<sup>1</sup>, Zhonghua Sun<sup>2</sup>

<sup>1</sup>Department of General and Laparoscopic Surgery, Sabya General Hospital, Jazan, Kingdom of Saudi Arabia; <sup>2</sup>Department of Medical Radiation Sciences, Curtin University, Perth, Australia

*Correspondence to:* Dr. Awaji Qasim Al-Naami. Department of General and Laparoscopic Surgery, Sabya General Hospital, Jazan 3261300, Kingdom of Saudi Arabia. Email: awaji10@hotmail.com.

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Dermatofibrosarcoma protuberans (DFSP) is a rare low-grade tumour which accounts for about 6% of all soft tissue sarcoma. It is typically a superficial cutaneous tumour characterized by high rates of local recurrence but with low risk of metastasis (1). In about half of DFSP cases, the tumour is located on the trunk, followed by 30-40% of cases located in the proximal portion of the limbs, and 10-15% of cases in the head and neck (2). Clinical diagnosis can be made based on tumour's clinical appearance, thus, the role of imaging diagnosis is limited. Despite its superficial location and slow growing feature, large lesions of DFSP may demonstrate deep tissue invasion and atypical manifestations, therefore, resulting in misdiagnosis. Since only several reports are available in the literature with a focus on imaging findings of DFSP (2-6), we report a case of DFSP with the aim of enhancing our knowledge of this

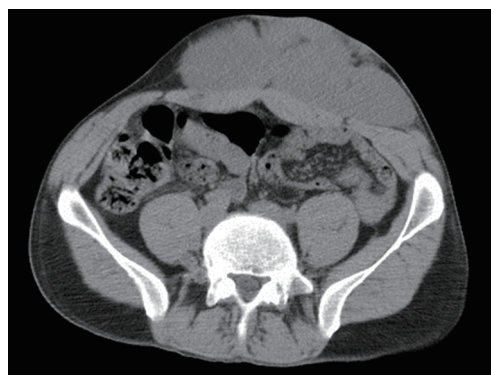
unusual tumour.

A 42-year-old male who was previously healthy presented to the surgical clinic with history of a soft slow-growing painless lump in his lower abdomen for 1 year, and with development of four protruding nodules for the last six months. His main complaint was due to cutting the overlying skin whilst shaving.

Clinical examination revealed that his vital signs were stable. No abnormality was detected in the chest and central nervous system. Abdominal examination showed a painless moveable mass having four red nodular swellings within the mass (*Figure 1*). The patient was admitted to the surgical ward. All biochemical investigations were within normal limits. Non-contrast abdominal CT scan was performed with images showing homogeneous nodular masses (*Figure 2*) in the anterior portion of abdomen. An elective surgery



**Figure 1** Clinical appearance of nodular masses at hypogastrium.



**Figure 2** Axial non contrast-enhanced abdominal CT image shows nodular, soft-tissue mass presenting with well-defined homogeneous density.

was planned for the patient. Postoperatively, the patient had uneventful recovery, and was discharged on the 7<sup>th</sup> post-operative day. He was referred to oncologist for radiotherapy management. The histopathological report shows slow to intermediate grade fibrosarcoma arising from DFSP.

DFSP often shows a well-defined isodense cutaneous or subcutaneous mass, with no calcification on CT scans. Homogeneous enhancement is seen in small tumours, while nonhomogeneous enhancement can be shown in large tumours on contrast-enhanced CT or magnetic resonance scans (3). Although magnetic resonance imaging (MRI) is not the first choice for diagnosis of DFSP, it has been shown to play an important role in surgical plan and follow-up (7). The CT and MRI findings for DFSP are nonspecific, but these imaging modalities may assist the differential diagnosis.

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### Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

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