

Case Report,

A Rare Case of Ischiorectal Fossa Lipofibroma

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Abstract:

Primary tumors, originating from ischiorectal fossa are exceedingly rare and in literature there are only a few case reports and small case series. Imaging techniques like magnetic resonance imaging and computed tomography play a critical role in diagnosis, staging, surgical planning and prognosis and magnetic resonance imaging is considered as the gold standard imaging modality. Surgical treatment is the first means of choice and radical resection provides a low rate of complications in experienced hands, excellent postoperative and long term outcomes. The aim of this article is to present a rare case with an ischiorectal lipofibroma, which was successfully operated at General surgery department and to create a brief review of literature.

Key words: imaging features, ischiorectal fossa, lipofibroma, treatment.

Introduction:

Primary tumors, originating from ischiorectal fossa (IRF) are exceedingly rare and in literature there are only a few case reports and small case series. The aim of this article is to present a rare case with an ischiorectal lipofibroma, which was successfully resected at General surgery department and to create a brief review of literature.

Case presentation:

A 50-year-old man was admitted to General surgery department with complaint of a non-inflammatory swelling in the left perianal region, noticed 10 days ago. Physical examination revealed a large protruding painless mass with a

moderately thick consistency. There was no history of any accompanying diseases and no deviations in paraclinical studies. Magnetic resonance imaging (MRI) of pelvis revealed well demarcated tumor with sharp and smooth borders, located in left ischiorectal fossa, with dimensions of 96/60 mm in coronal view (Fig. 1). It was nonhomogenous with predominant fat-equivalent content and with multiple irregular septations. The mass compressed left levator ani muscle and rectum, as there were no MRI data for infiltration. In addition, there were no enlarged regional lymph nodes or data for distant spread. A multidisciplinary discussion was performed and it suggested a direct surgical extirpation.

A Rare Case of Ischiorectal Fossa Lipofibroma

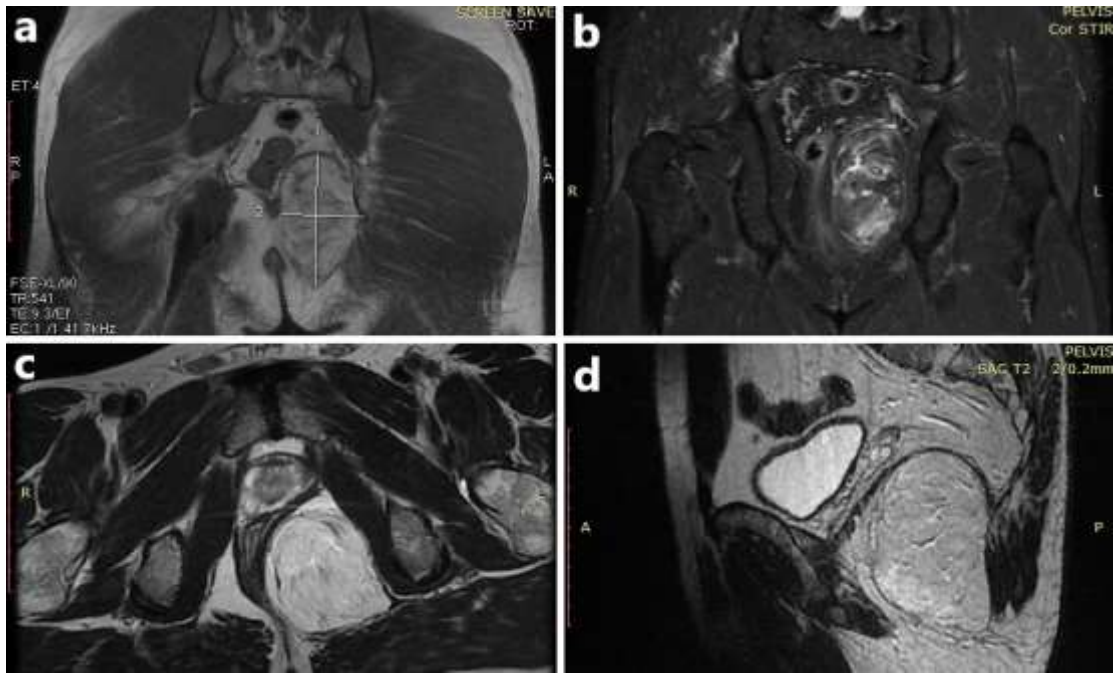


Figure 1: MRI images of lipofibroma. **a, b** Coronal views. **c** Axial view. **d** Sagittal view.

Under epidural anesthesia and patient in "jack-knife" prone position, it was made elliptical perianal skin incision. A well encapsulated tumor, lying aside from left levator ani muscle, was revealed (Fig. 2a). After precisely mobilization and dissection the mass was extirpated without

capsule's rupture and one drain was placed (Fig. 2b). The tumor's macroscopic features resembled lipoma (Fig. 3). Postoperative period was uneventful and the patient was discharged on the fourth postoperative day. Histopathological diagnosis revealed encapsulated lipofibroma.

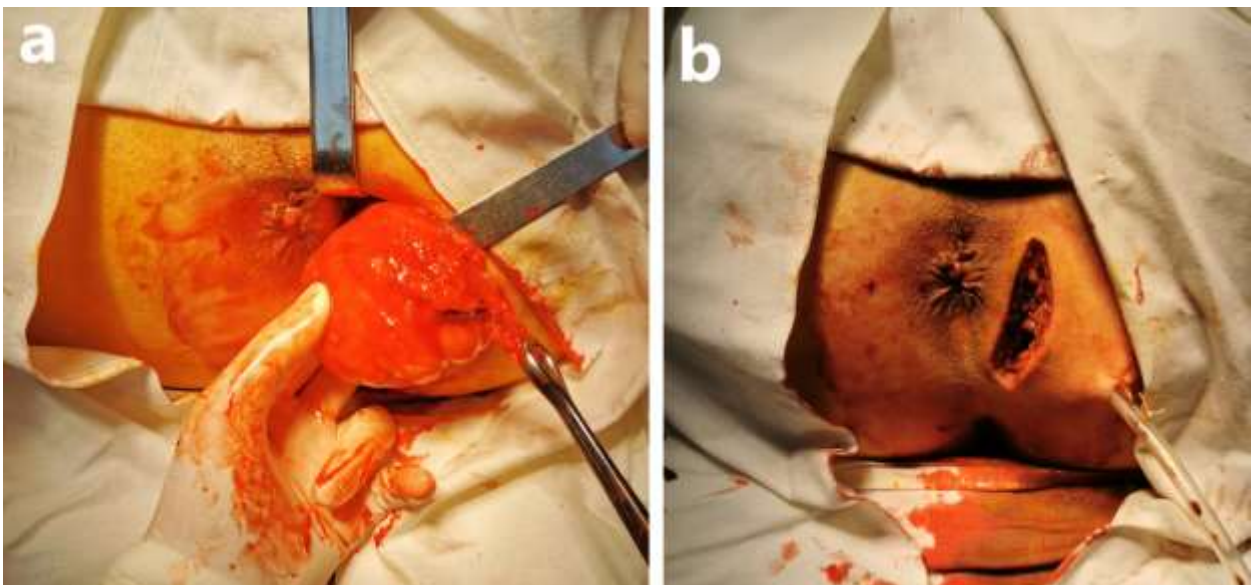


Figure 2: **a** An intraoperative view during tumor dissection. **b** A cavity after removing the tumor.

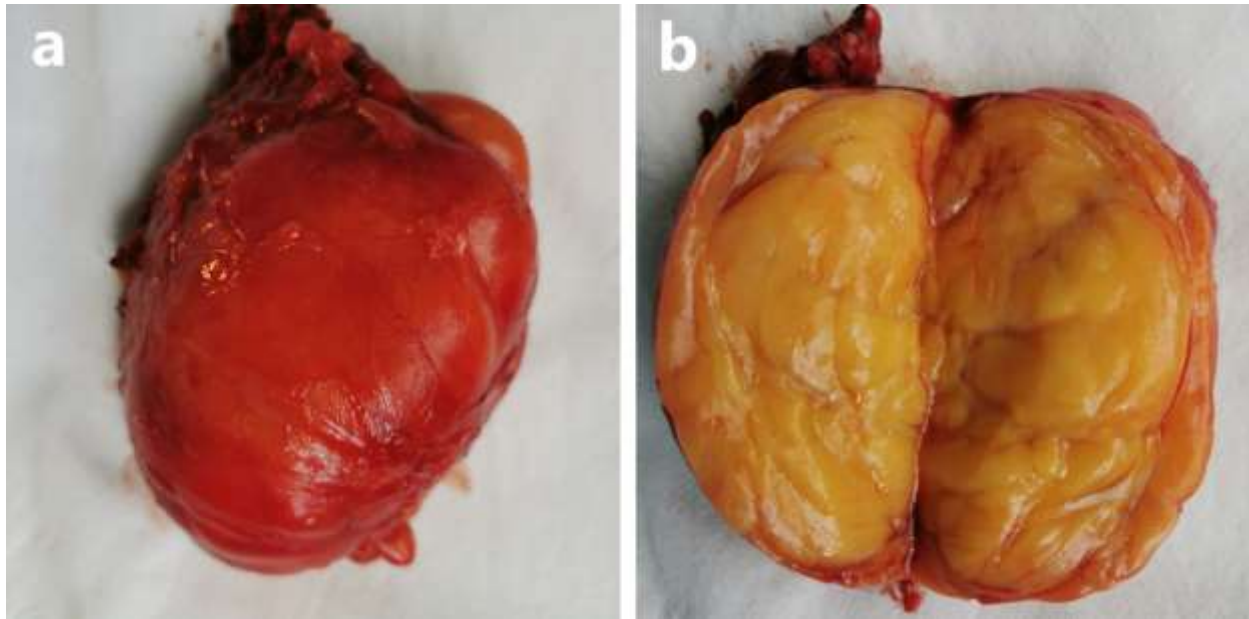


Figure 3: a A macroscopic view of the specimen. b A view inside the tumor after cut.

Discussion:

IRF is a perineal space with a pyramidal form, below the pelvic diaphragm. IRF relates medially with the rectum, levator ani and external anal sphincter; anteriorly with the superficial and deep transverse perineal muscle; laterally with the obturator internus and obturator fascia; posteriorly with the lower border of the gluteus maximus muscle and sacrotuberous ligament ⁽¹⁾.

IRF tumors encompass not only benign masses like lipofibroma, lipoma, solitary fibrous tumor, etc., but also malignant ones, which are primary: liposarcoma, leiomyosarcoma, etc. or secondary: metastatic or direct extension from adjacent organ's tumor ⁽²⁾.

Typical symptom of these tumors are a perineal swelling with or without obstructive symptoms due to compression of surrounding structures. Our patient had also a painless swelling in left perianal region and there were no symptoms of compression or invasion.

Imaging techniques like MRI and computed tomography play a critical role in diagnosis, staging, surgical planning and prognosis and MRI is considered as the gold standard imaging modality. Lipoma is presented on MRI as a noninfiltrative hypointense mass with presence of central septations with very high signal intensity ⁽³⁾. Solitary fibrous tumors usually exhibit low signal intensity relative to the muscle on T1

weighted images and variable signal intensity on T2 weighted images ⁽⁴⁾. Most liposarcomas appear well defined on MRI, mostly with lobulated margins and well differentiated liposarcoma is composed of mainly mature fat and shows faint or no enhancement after intravenous administration of contrast material ⁽⁵⁾. In our case the imaging study revealed a large well demarcated nonhomogenous tumor with predominant fat-equivalent content and with multiple irregular septations. The mass compressed the left levator ani muscle and rectum, but not invaded them.

Because of low incidence of IRF tumors, their close relationship to vital structures and challenging surgical excision, their management has not been protocolized and it should be discussed in a multidisciplinary meeting. Due to a higher risk of recurrence in malignant tumors neoadjuvant or adjuvant radio-chemotherapy is recommended. As other benign tumors, IRF lipofibroma has an excellent prognosis after surgical excision. Our case also is free of disease 2 years later.

Owing to the risk of misdiagnosis, malignant degeneration and progression of symptoms surgical extirpation is needed also for benign tumors. Resection could be done through an anterior, posterior or a combined approach like abdomino-perineal resection. Total abdominoperineal resection for a giant presacral

pelvic lipoma extended into the left ischiorectal fossa ⁽⁶⁾ as well as transsacral approach with partial resection of external sphincter and puborectalis for a well differentiated liposarcoma ⁽⁷⁾ were reported. In here presented case the tumor was successfully extirpated under epidural anesthesia through posterior approach with an elliptical perianal skin incision.

Conclusion:

IRF lipofibroma is a rare entity and presents a diagnostic and surgical challenge. Surgical treatment is the first means of choice and radical resection provides a low rate of complications in experienced hands, excellent postoperative and long-term outcomes.

Statements and Declarations

Informed Consent: The present article does not mention any patient or patient details and hence, formal ethical approval or informed consent is not required.

Competing Interests: The authors declare no competing interests.

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