Sir,

Lipoblastoma is a benign, soft tissue tumor arising from the adipocytes. It is usually seen in children under the age of 3 years with male preponderance. They usually present as superficial, slow-growing mass in extremities. Lipoblastomatosis is deep-seated lesions with infiltrative border. The present case is a case of lipoblastoma of gluteal region of a child.

A child of 3½ year presented with a nontender swelling on right gluteal region of 6 months duration. The size of the lesion was 4 cm × 3.5 cm. It was mobile, well circumscribed, and soft to firm in consistency. In pediatrics surgery outpatient department, this case was clinically diagnosed as lipoma. Ultrasound findings also suggested lipoma with a well-defined capsule. Mass was completely excised under general anesthesia and sent for histopathological examination. The gross specimen was yellowish in color with solid cut section. Microscopic examination revealed lobules of mature adipocytes separated by fibrovascular septa. There are areas of focal myxoid changes with the presence of immature adipocytes. Few of these immature adipocytes simulated lipoblasts. There were many intervening capillaries [Figure 1]. Histopathologically, this case was diagnosed as lipoblastoma. This patient had an uneventful hospital course and currently is doing well, after 6 months of surgery.

Lipoblastoma and lipoblastomatosis are rare benign tumors of adipocytic origin. The term “lipoblastoma” was coined by Jaffe in 1926. Most common site of lipoblastoma is extremity. Other sites such as mediastinum, retroperitoneum, trunk, head and neck, and organs (lung, heart, and parotid gland) can be affected. There are few cases of lipoblastoma described in the gluteal region. One such case of lipoblastoma is described by Morerio et al. in the left gluteus of a 3-year-old girl which was thought to be a posttraumatic hematoma.

The differential diagnoses for these tumors include other adipocytic tumors such as lipoma, hibernoma, and myxoid liposarcoma. Histopathologically, lipoblastoma shows a lobular architecture. The lobules are composed of both mature and immature fat cells in varying proportions and separated by fibrous septa. The presence of lipoblasts differentiates them from lipoma. Myxoid liposarcomas are rare in children under the age of 10 years. Myxoid liposarcoma lacks the pronounced lobulation of lipoblastoma. Absence of nuclear atypia and atypical mitoses helps to differentiate lipoblastoma from myxoid liposarcoma. In hibernoma, the predominant cells are of brown fat and they lack lipoblasts.

In cytogenetic analysis of lipoblastoma, there is a breakpoint in the 8q11-13 region or polysomy of chromosome 8, which leads to the activation of the oncogenic pleomorphic adenoma gene 1 (PLAG1) on 8q12. PLAG1 gene is specifically rearranged in lipoblastoma, and it helps to identify lipoma-like lipoblastoma.

Lipoblastoma is a benign tumor; hence, the treatment of choice is surgical resection. Prognosis is excellent with complete surgical resection. There is no need for further radiotherapy or chemotherapy. In 14%–25% of cases of lipoblastoma, there is the chance of recurrence. Recurrence is commonly due to incomplete surgical removal. Hence, there is a need for follow-up.

Declaration of patient consent
The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest
There are no conflicts of interest.

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Figure 1: (a) Lobules of mature adipocytes separated by fibrovascular septae (H and E, ×40) (b) immature adipocytes in myxoid stroma (H and E, ×400)
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