Lipoblastomas at Rare Sites: A Report of Two Cases

Sir,

Case 1: An 11-month-old previously healthy male child came with gradually increasing left-sided neck swelling for 3 months of age. On examination, a soft nontender swelling with normal overlying skin measuring 10 cm × 8 cm was seen occupying the anterior and left lateral aspect of the neck [Figure 1a]. Radiological investigations (computed tomography and ultrasonography) revealed a large heterogeneous mass measuring 9 cm × 9 cm × 7 cm located in the left lateral neck, containing fat and calcification and causing shift of the left lobe of thyroid. The possibility of a teratoma or a lipoma was considered. The excised mass was sent for pathological examination. On gross examination, the lesion was a globular and encapsulated and measured 10 cm × 8 cm × 6 cm. The cut surface was pale yellow, glistening, lobulated and showed a cystic area in the center with smooth walls [Figure 1b].

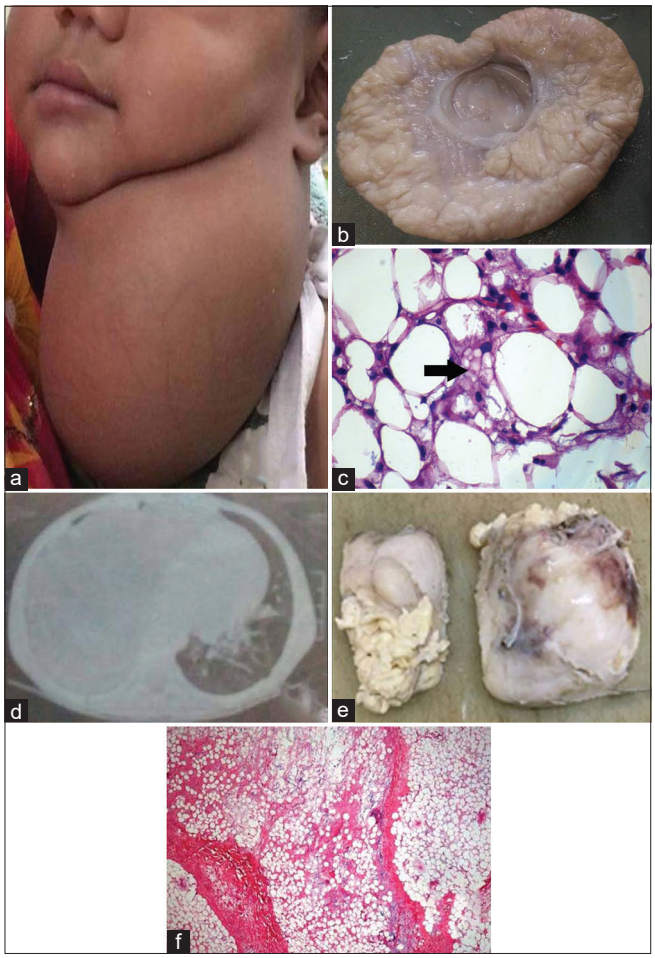

Figure 1: Case 1: (a) Globular neck mass. (b) Cut surface-pale yellow, lobulated with a central cystic area. (c) Multiloculated lipoblast amidst mature adipocytes (arrow) (H and E, ×400). Case 2: (d) Computed tomography: A large tumor occupying the right hemithorax. (e) Two partially encapsulated tumor fragments of the mediastinal tumor. (f) Lobulated myxoid tumor comprising mature adipocytes (H and E, ×100)

Case 2: A 5-year-old male child presented with recurrent cough and cold for 2-year duration. Routine blood investigations were normal. High-resolution computed tomography of the chest revealed a large soft-tissue mass in the right hemithorax and anterior mediastinum causing partial compression of the right lung and displacement of the mediastinum to the left side [Figure 1d]. Radiological differential diagnosis was a mature teratoma or lipoblastoma. Right thoracotomy was performed. Intraoperatively, there was huge well-encapsulated tumor 20 cm × 15 cm × 15 cm splaying the middle and lower lung lobes and extending toward opposite mediastinum with encapsulation. The mass was excised and sent for pathological examination. We received two partially encapsulated fragments measuring 12 cm × 10 cm × 5 cm and 9 cm × 7 × 2 cm, respectively [Figure 1e]. The cut surface was yellow, glistening, and lobulated.

Microscopy of both cases showed a focally myxoid and lobulated lesion predominantly composed of mature adipocytes without nuclear atypia. Few univacuolated and multivacuolated lipoblasts were seen [Figure 1c and f]. Neither thymic tissue nor any germ cell component was demonstrated even after thorough sampling in the mediastinal tumor. Histopathological diagnosis of lipoblastoma was given. Both patients are doing well.

Most lipoblastomas are seen in children below the age of 5 years and measure <5 cm in size.[1,2] Lobulation and presence of lipoblasts are the characteristic pathologic features. Both tumors in the present report were larger than 10 cm. In literature, only two more cases of mediastinal lipoblastoma have a size larger than ours. Hence, ours is the third largest mediastinal lipoblastoma.[2] Lipoblastomas are commonly located in extremities and the trunk and present as painless slow-growing masses. Rare locations include the head and neck, retroperitoneum, groin, gluteal region, labia, vulva, and the mediastinum.[1] Head–neck lipoblastomas comprise 15% of cases.[3] In few large series comprising 25, 24, and 23 cases of lipoblastomas, 5, 4, and 2 cases were found in the neck, respectively.[1,3,4] Thus, about 45 cases of cervical lipoblastomas have been reported in literature.[3-5] Mediastinal lipoblastomas are rarer. To the best of our knowledge, only about twenty cases of mediastinal lipoblastomas have been reported in literature.[2]

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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