3. The expanded progamme on immunization in South Africa. Available from URL: http://www.hst.org.za/pubs/edl/phc/10.6asp-9k

4. VSO: Pharmacy procedures by Rachel Blake. Available from URL: http://www.oneworld.org/vso/pubs/wpapers/pharm/6.htm

Massive Lipoblastoma Foot

A 6-year-old female child presented with a huge mass in her left foot for the last 5 years. The parents first noticed a pea sized mass at 1 year of age on the under aspect of left foot. The onset of this mass was not associated with fever and or trauma. The mass painlessly and steadily progressed since then to the present size, when she presented with a large swelling of the size of pumpkin on the plantar aspect of the left foot, which caused undue discomfort and difficulty in walking. Physical examination revealed an 8 × 10 cm firm, lobulated mass on the plantar aspect of left foot encroaching more on the medial aspect. The mass was nontender, noncompressible and nonpulsatile. Skin over the mass was glossy and shiny with prominent veins over it. Neurological examination and pulses in the left foot were normal. Right foot was essentially normal.

Plain radiograph of the left foot showed a lobulated rounded soft tissue swelling on the plantar aspect with no evidence of any calcification, bony destruction or hypertrophy of the underlying bones. Contrast enhanced CT scan revealed a circumscribed, lobulated, subcutaneous, hypodense lesion of fat attenuation, seen extending from inferomedial aspect of medial malleolus to the plantar aspect of the foot just proximal to the origin of toes with enhancing internal septations (*Fig. 1*). Scalloping of the inferomedial aspect of the calcaneum and first metatarsal was seen and rest of the bones were normal. FNAC of the mass revealed only fibrofatty tissue.

Wide excision of the tumor superficial to the plantar fascia was performed without any complication. Gross examination of the resected tumor showed a 7 × 9 cm sized encapsulated, firm, lobulated mass, which on cut section showed lobulations with internal septations. On microscopic examination, the tumor consisted of some immature fat cells divided into lobules by fibrous septa with minimal myxoid areas. There was no evidence of any nuclear pleomorphism, giant cells, or atypical mitoses. The mass was diagnosed as lipoblastoma of the foot.

Lipoblastoma is a rare soft tissue tumor arising from embryonic fat and is usually found in areas of abundant adipose tissue. Seventy percent of lipoblastomas occur in extremities, more so in lower limbs(1-3). However, there are reports(4,3) describing the predilection of lipoblastoma at sites with primitive adipose tissue like axilla, neck, chest, retroperitoneum and prevertebral soft tissue. Plantar aspect of foot, as seen in the present case, is an extremely unusual site due to the scarcity of the adipose tissue in this area. It is histologically, benign and lacks metastatic potential. Differential diagnoses include lipomas, fibromyxolipomas or spindle cell limpomas and soft tissue sarcoma. However the demonstration of fatty mass on CT/MRI limits the number of differentials. In the absence of any atypical lipoblasts, mitoses, hyperchromatic nuclei the possibility of ma-

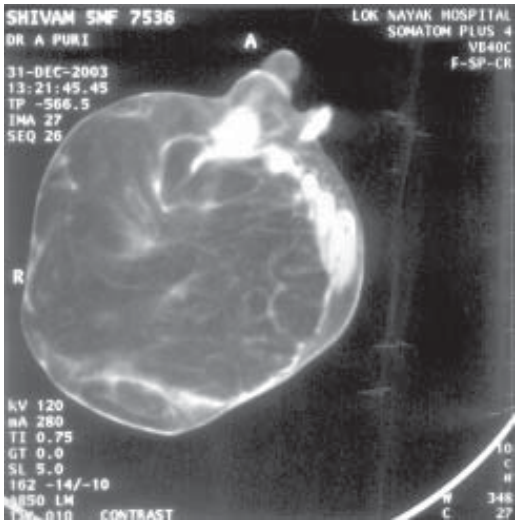

Fig. 1. Contrast enhanced CT scan of left foot showing the tumor mass.

lignancy (liposarcoma) is extremely remote.

The treatment is total excision to avoid recurrence. Radical mutilating surgeries are not advocated for these tumors in view of their benign nature. Local recurrence is a possibility, so careful follow-up is essential at least till one year, as local recurrence is reported unlikely after one year(3).

Rajat Gupta,
Archana Puri,
Department of Pediatric Surgery,
Maulana Azad Medical College and
Lok Nayak Hospital,
New Delhi 110 002, India.

Correspondence to:
Dr. Archana Puri,
4.2, Administrative Block,
St. Stephen Hospital,
Delhi 110 054, India.
E-mail: puriarchana@hotmail.com

REFERENCES

1. Gilbert TJ, Goswitz JJ, Teynor JT, Griffiths HJ. Lipoblastoma of the foot. Skeletal Radiol 1996; 25: 283-286.
2. Nmadu PT. Giant Lipoblastoma: A case report. Annals Tropical Pediatr 1992; 12 : 417-419.
3. Stringel G, Shadling B, Mancer K, Ein SH. Lipoblastoma in infants and children. J Pediatr Surg 1982; 17: 277-280.

Primary Lymphedema in a Four- Year-Old Boy

Primary lymphedema is usually due to either a congenital absence of, or abnormalities in lymphatic tissue or it is caused by mutations in genes influencing lymphatic development(1). It can be sporadic or hereditary. Primary lympedema generally presents with a swollen extremity, most often affecting the lower extremities. A four-year-old boy with sporadic type of primary lymphedema is presented here whose symptoms have started at the age of two years with the involvement of the face and both hands and feet.

A four-year-old boy presented with non-pitting edema that involved his hands, feet and the face (*Fig. 1*). His family noticed the swelling at the age of two years. The amount of edema was described as increasing slowly but never showing regression. There was no family history of such edema. On physical examination, there was non-pitting, nontender, nonerythematous edema of the hands, feet and the face. The remainder of the physical examination did not reveal pathological finding.