Case Report ISSN 2689-1085

Journal of Pediatrics & Neonatology

Lipoblastoma Located on the Back: A Case of A 7-Month-Old Girl

Benmassaoud Zineb[1*], Ben Tayeb Tayeb[1], Balde Fatoumata Binta[1], Mahmoudi Abdelhalim[1,2], Khattala Khalid[1,2] and Bouabdallah Youssef[1,2]

[1]*Department of Pediatric Surgery, Hassan II University Hospital, Morocco.*

[2]*Sidi Mohamed Ben Abdellah University Hospital, Morocco.*

[*]Correspondence:
Zineb Benmassaoud, Department of Pediatric Surgery, Hassan II University Hospital, Morocco.

Received: 28 November 2020; **Accepted:** 14 January 2021

Citation: Zineb B, Tayeb BT, Binta BF, et al. Lipoblastoma Located on the Back: A Case of A 7-Month-Old Girl. J Pediatr Neonatal. 2021; 3(1): 1-3.

ABSTRACT

Introduction: *Lipoblastoma is a rare form of a tumor. It is a benign tumor of embryonic adiposis tissue that primarily occurs in children younger than 3-years. Lipoblastoma is most located in the extremities and trunk. There is the focal circumscribed lipoblastoma and the infiltrating lipoblastoma. The management is complete surgical resection.*

Through a clinical description, we report the case of a lipoblastoma in a 7-month-old infant. The study aims to compare the clinical and outcome aspect with those in the literature.

Case: *A 7-old-month girl, who presents from birth a masse on the right trapezius muscle, fixed 8x 5 cm of large. No inflammatory signs in front of the tumor and no other location.*

We performed a total resection of the tumor and the pathology analysis found a lipoblastoma.
After 2-years of follow-up, there is no recurrent tumor. The patient had no symptoms.

Discussion*: Lipoblastoma is a rare infant tumor with boy tendency.*

Another rare localization is reported as the neck, back, mesenteric, retroperitoneum, scrotum. CT scan and MRI can play a role in the possible preoperative assessment to evaluate the extent of the mass.

In this particular localization, it is necessary to exclude any Intra medullar spinal extension. Surgical resection is the optimal treatment.

Conclusion*: Lipoblastoma is a rare tumor and has a good prognosis.*

Keywords
Lipoblastoma, Child, Surgery, Tumor.

Introduction
Lipoblastoma is a rare benign and encapsulated tumor from embryonic white fat. It is a soft and indolent tumor frequently located in the extremities and the trunk [1]. Which primarily occurs in children younger than 3-years? But other locations have been described; it has an excellent prognosis [2]. There are the focal circumscribed lipoblastoma and the infiltrating lipoblastoma [2]. The management is complete surgical resection.

Through a clinical description, we report the case of a lipoblastoma in a 7-month-old infant. The study aims to compare the clinical and outcome aspect with those in the literature.

Case Report

A 7-month-old Moroccan girl received for 5-month evolution of a painless mass on the back. Physical examination showed a soft and indolence tumor on the right trapezius muscle measuring 8x5 cm. No inflammatory signs and no other location and lymph nodes were not palpable. The biological assessment was normal.

We performed a thoracic CT- scan that showed a tumoral process of the fat tissue of the soft subcutaneous parts and the right paravertebral muscles measuring 60 * 70 * 50 mm. We completed an MRI wish excluded any Intra medullar spinal extension (Figures 1).

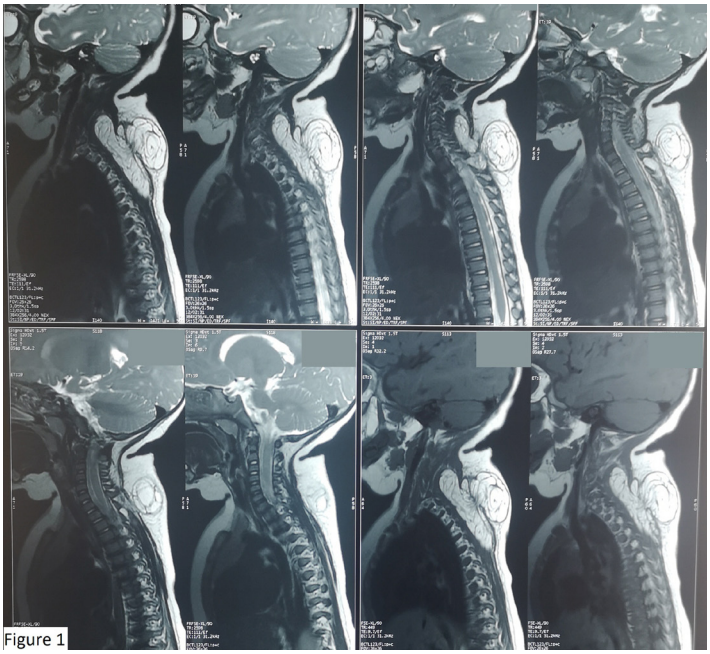

Figure 1: MRI exploration showed a lesion process of the fatty tissue of the soft subcutaneous parts and the right paravertebral muscles measuring 60 * 70 * 50 mm, septate, absence of intracranial spinal extension.

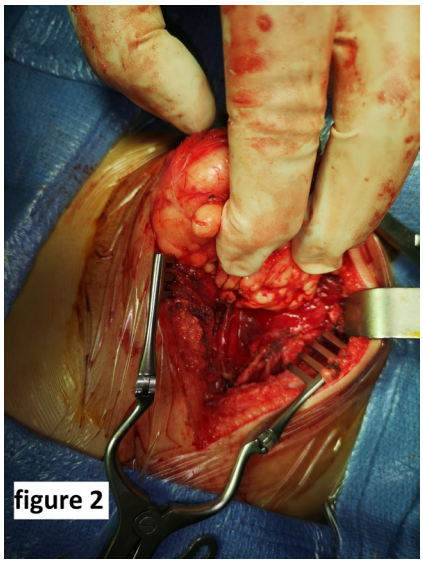

Figure 2: Intraoperative image, encapsulated polylobed tumor, sitting between trapezius and rhomboids muscle.

Under general anesthesia, exploration found a poly-lobed encapsulated mass adherent to the rhomboid muscles and the trapezius muscle (Figure 2).

We performed a complete resection of the mass without opening the capsule.

It was 8.5 cm mass containing several lobules of fatty aspects grouped in clusters (Figure 3). Histological analysis showed a benign tumor proliferation made up of lobules separated by fibrous septa. Presence in the lobules of mature and immature adipocytes (lipoblasts). The histological appearance was compatible with a lipoblastoma.

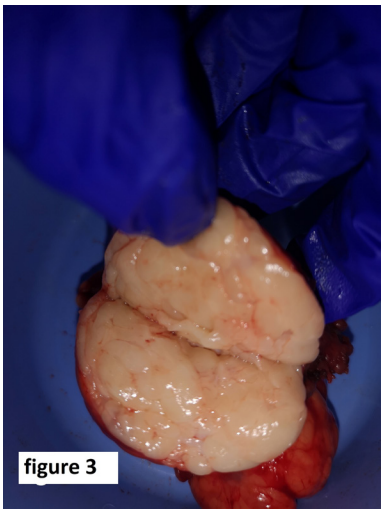

Figure 3: Raw appearance of lipoblastoma. The tumor is encapsulated, soft and myxoid.

After 2-years of follow-up, there is no recurrent tumor. The patient had no symptoms.

Discussion

Lipoblastoma is a rare tumor developed from immature fat cells. The age of diagnosis is usually 88 % under three-years-old [3].

Some exceptional age at the diagnosis has been reported from 5 days to 18 years old [1,2,4]. Although a boy tendency is reported 74%, with a predominance of the race, no causal relationship or predictive factors are established **[***2-4*].

The usual localization is the extremities and the trunk, but another rare localization is reported such as the neck, back, mesenteric, retro peritoneum, and scrotum [4]. Usually, it is a soft and painless mass without inflammatory signs.

Imaging such as US, CT-scan, or MRI will give results, consistent with a fat tissue tumor, though it will never give us an exact diagnosis. We need to point out that CT and certainly MRI can play an important role in the possible preoperative assessment to evaluate the extent of the mass [*2*].

In this particular localization, it is necessary to exclude any Intra medullar spinal extension by MRI. Surgical resection is the optimal treatment [1-4].

It is primordial to eliminate:
- The myxoid liposarcoma: rare than the lipoblastoma and has abnormalities in mitosis.
- The lipoma exceptional in children.
- The hibernoma tumor is characterized by the proliferation of uniform mature fat cells, with a small cytoplasm. [5]. There is no recurrent mass described in the literature [3,4].

Conclusion

Lipoblastoma is a rare tumor and has a good prognosis. Imaging is used to guide the diagnosis, which can only be confirmed by histopathological examination. The treatment is surgical with total excision.

References

1. Hwan Jun Choi, Young Man Lee, Ji Hye Lee, et al. Pediatric Lipoblastoma of the Neck. The Journal of Craniofacial Surgery. 2013; 24: 5.
2. Van Waes C, Bronckaers M. Lipoblastoma of the Back; a case of a 7-month-old Boy. Acta Chir Belg. 2009; 109: 538-540.
3. Adnani A, Chellaoui M, Chat L, et al. Aspect inhabituel d'un lipoblastome axillaire chez un nourrisson. J Radiol. 2005; 86: 1043-1045.
4. Jamshid Abdul-Ghafar, Zubair Ahmad, Muhammad Usman Tariq, et al. Lipoblastoma: a clinic pathologic review of 23 cases from a major tertiary care center plus detailed review of literature. BMC Res Notes. 2018; 11: 42.
5. Furlong Ma, Fanburg-Smith JC, Miettinen M. The morphologic spectrum of hibernoma: a clinic pathologic study of 170 cases. AM J Surg Pathol. 2001; 25: 809-814.