The Turkish Journal of Pediatrics 1995; 37: 263-267

ANGIOMYOLIPOMA LOCATED IN THE LUMBAR REGION OF A NEWBORN*

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SUMMARY: Gündoğdu ZH, Kale G, Tanyel FG, Akçören Z, Büyükpamukçu N. (Department of Pediatric Surgery and Pathology Unit, Department of Pediatrics, Hacettepe University Faculty of Medicine, Ankara, Turkey). Angiomyolipoma located in the lumbar region of a newborn. A case report. Turk J Pediatr 1995; 37: 263-267.

An unusual example of angiomyolipoma, which presented as a bulging mass on the right lumbar region of a newborn baby, is presented. The case described is the first report of a newborn with an unusually located angiomyolipoma. The most common predilection sites are the renal parenchyma and the retroperitoneum. However, most of the patients described are adults, and to the best of our knowledge no newborn patient has previously been reported in the literature. *Key words: angiomyolipoma, lumbar region mass.*

Angiomyolipomas are hamartomatous lesions composed of a variable mixture of smooth muscle, blood vessels and fat. They are usually discovered either during routine examination, in patients with tuberous sclerosis, or in cases of hemorrhage into or from a tumor[1,2]. The most common predilection sites are the renal parenchyma and the retroperitoneum[3,5]. Unusual examples of angiomyolipomas have also been reported in the mediastinum, liver and spleen[4,6,7]. However, most of the patients described are adults, and to the best of our knowledge no newborn patients have previously been reported in the literature.

The case described is the first newborn with an unusually located angiomyolipoma.

Case Report

A five-day-old baby was admitted with a bulging mass in the left lumbar region which was first noticed at birth. The physical examination revealed a soft, regular, immobile mass, 6x4 cm in diameter, originating from the abdominal wall in the left lumbar region (Fig. 1). The laboratory findings, which included routine hematological and biochemical investigations, were within normal limits.

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Intravenous pyelography (IVP) was normal (Fig. 2). Ultrasonographic examination revealed a solid mass 10x6 cm in diameter within the abdominal wall. Computerized tomography (CT) revealed a mass at the L1-L5 vertebral level, extending from the right paravertebral area within the paraspinal and quadratus lumborum muscles to the retroperitoneal space, 10x7.5x6 cm in diameter and composed of low-density lipoid material (Fig. 3).

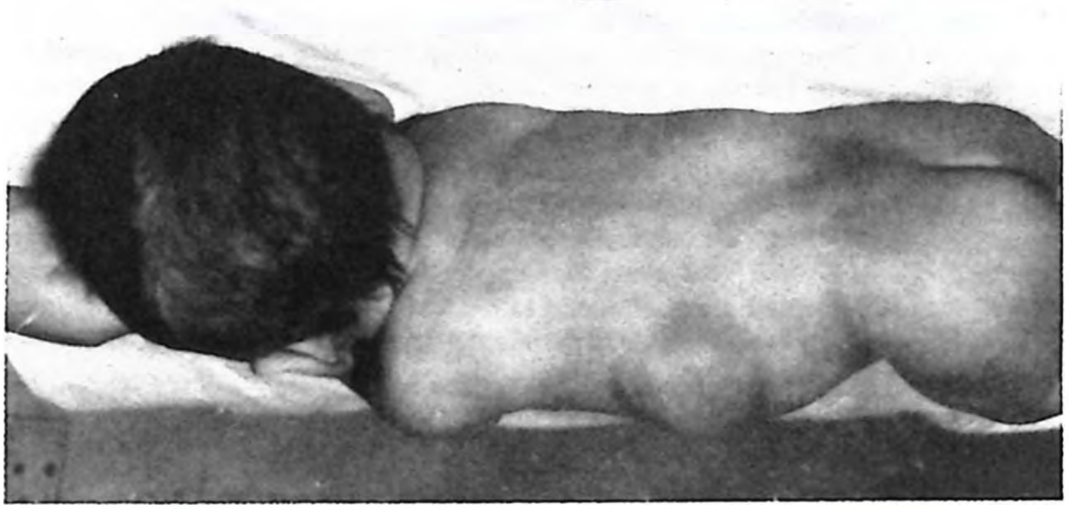

Fig. 1: A five-day-old baby with a bulging mass in the left lumbar region.

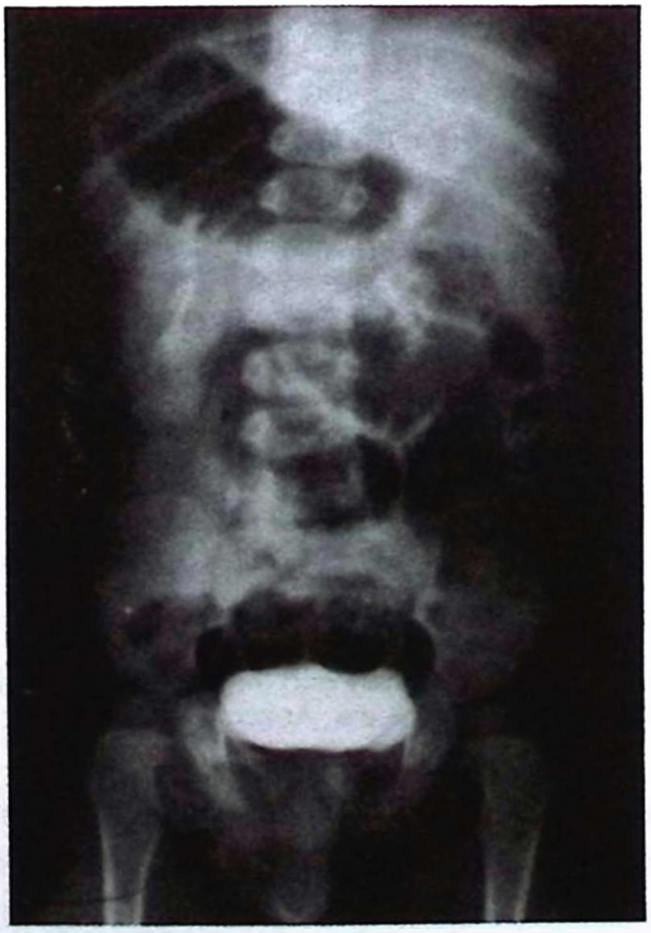

Fig. 2: Normal intravenous pyelogram.

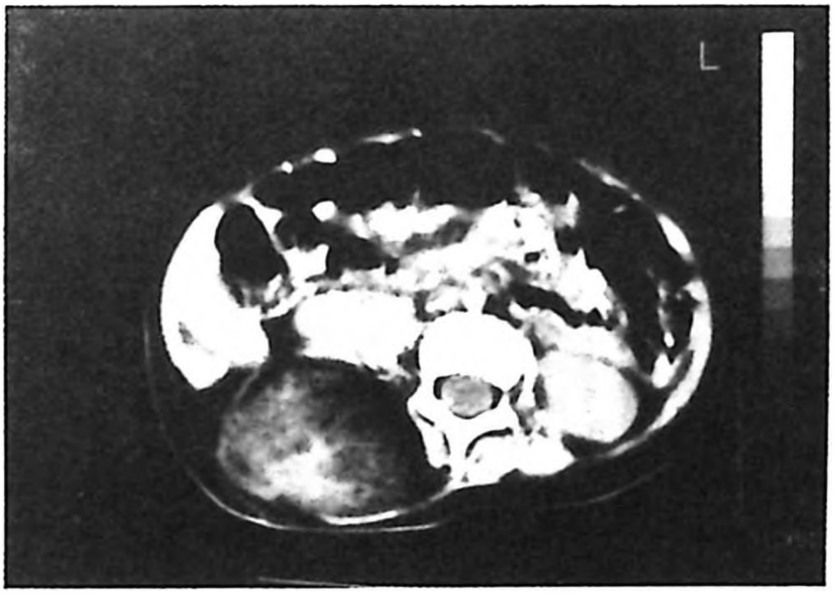

Fig. 3: Computerized tomography showing a mass at L1-L5 vertebral level extending from the right paravertebral area within the paraspinal and quadratus lumborum muscles to the retroperitoneal space 10x7.5x6 cm in diameter and composed of low-density lipoid material.

Surgery was performed to excise the mass through a vertical incision over it. During surgery, an easily bleeding mass with no surrounding capsule was found. A biopsy was performed from the mass. The histopathological examination revealed that the specimen consisted of bundles of smooth muscle cells, thick-walled, hyalinized blood vessels and mature adipose tissue, which were consistent with angiomyolipoma (Fig. 4).

No treatment was given postoperatively. During follow-up examinations extending one year postoperatively, the patient was symptom-free and the mass was found to be of the same dimensions.

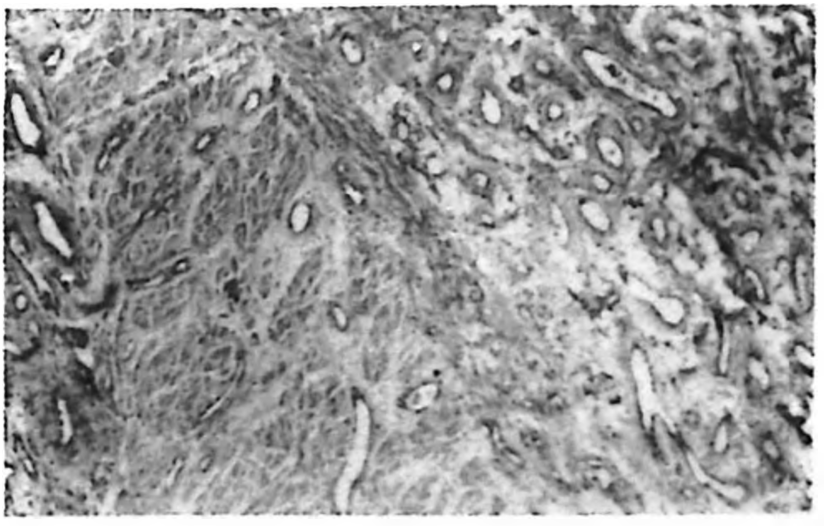

Fig. 4: The histopathological examination revealed that the specimen consisted of bundles of smooth muscle cells, thick-walled hyalinized blood vessels and mature adipose tissue, which were consistent with angiomyolipoma.

Discussion

Angiomyolipoma is not a very rare tumor, with more than 300 patients described in the literature[8], but it is not mentioned among the masses encountered in newborn children. However, the presented case reveals the possibility of angiomyolipoma even in newborns.

Additionally, most reported angiomyolipomas originated from the renal parenchyma[3, 4, 5] and the retroperitoneum. Although some involvements, such as the liver, spleen, head, neck, spinal cord and penis[1, 6, 7, 9, 10], are reported, abdominal wall involvement has not previously been encountered. To the best of our knowledge, this is the first reported case with abdominal wall involvement.

Angiomyolipoma is a benign tumor, but some reviews have found mitotic figures in 50 percent and renal capsular invasion in 25 percent of cases[4, 11, 12]. A single case of recurrence following partial surgical resection of a renal angiomyolipoma was also reported[11]. In our case, total excision was not considered to be passible, and a biopsy for histopathological diagnosis was performed. This histopathological examination did not reveal mitotic figures. Since some angiomyolipomas can be more harmful than it is generally believed, we observed the case closely with monthly check-ups. During one year of follow-up, there was no change in the dimensions of the mass, and the child's growth was found to be within normal limits.

In conclusion, angiomyolipoma can indeed be found in very young children, and can also involve the abdominal wall musculature.

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