LIPOFIBROMA OF THE MEDIAN NERVE IN THE PALM

O. Güven, M.D. ** / S. Küllü, M.D. *

* Associate Professor, Department of Pathology, Faculty of Medicine, Marmara University, Istanbul, Turkey.

** Assistant Professor, Department of Orthopaedics, Faculty of Medicine, Marmara University, Istanbul, Turkey.

SUMMARY

A case of intraneural lipofibroma of the median nerve is reported. There was only a vague pain at the thenar region. Mass was completely excised without any complication.

Key Words: Intraneural lipofibroma, median nerve

INTRODUCTION

Neural tumors rarely occur in the hand. Especially intraneural lipomas are very unusual (1). In 1932 Adair et al. reported 2 lipomas in the hand among 352 lipomata (2). Fatty and fibrous enlargement of the supporting structures of the median nerve have been described for over 20 years.

In 1964, five separate reports (3,4,5,6) of lipofibroma of the median nerve were published and additional cases (7,8,9) have been available since then. Johnson and Bonfiglio (10) summarized the literature in 1969 reviewing a total of fourteen cases. In 1973, Louis and Dick (11) reported the fifteenth case. In 1979, Jamra (12) and Patel (13) reported two separate cases.

CASE REPORT

A 52 year old female was admitted to the hospital with the chief complaint of a swelling of the left palm. The mass had been present for 2 years causing a vague pain in her palm and thumb. Physical examination revealed an ovoid, moderately firm mass, measured 3 x 2 x 2 cms at the thenar region next to the distal portion of the transvers carpal ligament.

At operation, an encapsulated tumor was found between the thenar muscles. Further dissection revealed that it originated from the median nerve. Digital nerves were protruding out of the mass. It appeared like a neurinoma. Epineurium and the nerve sheath were dissected longitudinally and the mass was removed

totally.

Grossly, the cut surface was yellowish white and fatty in appearance.

Microscopic sections (Fig. 1) revealed a well defined fibrous capsule, containing nerve fibers, enclosing a mature adipose tissue, with occasional fibrous bundles. The diagnosis was lipofibroma.

Postoperative examination did not show any motor and sensory loss.



Fig.1- Photomicrograph shows fibrous capsule containing nerve fibers and mature adipose tissue. (H.E. X100)

DISCUSSION

Many terms have been proposed for the median nerve tumors of the adipose tissue origin such as lipofibroma (8,12,13), encapsulated lipoma (9) and lipomatous hamartoma (7,10).

Some authors recommended decompression of the nerve and the biopsy (3,4,8,10,11). Conversely, some surgeons preferred total resection (6,9). None of the cases showed recurrences.

The origin of the intraneural lipoma or lipofibroma was probably adipose tissue of the epineurium. To our knowledge this case is the 18th of encapsulated lipofibromas to be reported in the literature.

REFERENCES

- 1. Paerlberg D, Linscheid RD, Soule EH. Lipomas of the Hand.Mayo Clin Proc. 1972; 47: 121-124.
- 2. Booher RJ. Lipoblastic Tumors of the Hands and Feet. J Bone Joint Surg. 1965; 47-A:727-740.
- 3. Mikhail IK. Median Nerve Lipoma in the Hand. J Bone Joint Surg. 1964; 46-B:726-730.
- 4. Pulvertaft RG. Unusual Tumors of the Median Nerve. Reports of the 2 cases. J Bone Joint Surg. 1964; 46-B:731-733.
- 5. Yeoman PM. Fatty infiltration of the Median Nerve. J Bone Joint Surg. 1964; 46-B:737-739.
- 6. Morley GII. Intraneural Lipoma of the Median Nerve in the Carpal Tunnel. Report of a case. J

- Bone Joint Surg. 1964: 46-B:734-735.
- 7. Emmest AJJ. Lipomatous Hamartoma of the Median Nerve in the Palm. British J Plast Surg. 1965; 18:208-213.
- 8. Rowland SA. Lipofibroma of the Median Nerve in the Palm. J Bone Joint Surg. 1967; 49-A: 1309-1313.
- 9. Watson-Jones R. Encapsulated Lipoma of the Median Nerve at the Wrist. J Bone Joint Surg. 1964; 46-B(4):736-739.
- 10. Johnson RJ, Bonfiglio M. Lipofibramatous Hamartoma of the Median Nerve. J Bone Joint Surg. 1969; 51-A:984-990.
- 11. Louis DS, Dick HM. Ossifying Lipofibroma of the Median Nerve. J Bone Joint Surg. 1973; 55-A:1082.
- 12. Jamra FNA, Rebeiz JJ. Lipofibroma of the Median Nerve. J Hand Surg. 1979; 4:160.
- 13. Patel ME, et al. Lipofibroma of the Median Nerve in the Palm and digits of the Hand. J Bone Joint Surg. 1979; 61-A:393.