

# **Clinical Image**

**Open Access, Volume 3** 

# Schwannoma of the hand

Dong Yun Lee; SuRak Eo\*

Department of Plastic and Reconstructive Surgery, Dong Guk University School of Medicine, Seoul, South Korea.

## \*Corresponding Author: SuRak Eo

Department of Plastic and Reconstructive Surgery, Dong Guk University Medical Center, Dongguk-ro 27, IlSanDonggu, GoYang-si, Gyeong Gi-do, 10326, South Korea. Tel: +82-31-961-7330 & 82-31-961-7347; Email: sreodoc@gmail.com

Received: May 01, 2023 Accepted: Jun 23, 2023 Published: Jun 30, 2023 Archived: www.jclinmedimages.org Copyright: © SuRak E (2023).

## **Clinical image description**

A 67-year-old lady presented with a slowly enlarging soft tissue mass on her left palm, at 4th metacarpal bone level (Figure 1). She first discovered the mass about a year ago and wanted it resected due to discomfort. There was no other symptom accompanied. A bean-sized mass under the skin was palpated, relatively fixed and firm. Ultrasound was performed preoperatively and 0.8 x 0.5 x 0.9 cm sized nerve sheath tumor was suspected between the 4<sup>th</sup> and 5<sup>th</sup> flexor digitorum tendons, with a string sign (Figure 2). Intraoperatively, authors detected a mass originating from a nerve with overlying fascicles and vessels (Figure 3). Surrounding vessels and nerves were cautiously preserved and complete resection was done (Figures 4 and 5). Pathologic result was a schwannoma with clear resection margin. There was no complication including neurologic symptoms postoperatively.

Schwannomas are benign lesions originating from peripheral nerve sheath [1]. They rarely occur in the hand and wrist, reported only 1 percent of all schwannomas [2]. Most of them are on the volar aspect, present as a solitary, slow-growing nodule. Proximal lesions do not usually have symptoms, while distal lesions, involving digital and common digital nerves accompany pain. They are hard to diagnose only through physical exami-



**Figure 1:** A 67-year-old female patient complained of a slow-growing nodule on her left palm.

#### Citation: Lee DY, SuRak E. Schwannoma of the hand. Open J Clin Med Images. 2023; 3(1): 1115.

nation, so imaging study must be considered beforehand, and prevent devastating results, such as nerve resection [3]. Surgical enucleation from the originating nerve is the mainstay of treatment [2]. Careful dissection should be emphasized during the procedure, to overcome permanent neurological deficit.

In our case, preoperative ultrasound detected "string sign", appearing from the vertical origination from the soft tissue [3]. String sign appear to nerve sheath tumors which helped authors cautiously dissect during the operation. Successful complete preservation of nearby vessels and nerve fascicles resulted in no neurologic complication in this patient.



**Figure 2:** Ultrasonographic findings: Axial scan shows homogenous, anechoic mass (asterisk) between 4th (white number 4) and 5<sup>th</sup> flexor tendon (white number 5).



Figure 3: Intraoperative photo: A 0.8 x 0.9 sized mass was discovered surround by nerve fascicles and vessels.



Figure 4: Intraoperative photo: After dissection, complete preservation of nerves and vessels.



**Figure 5:** Intraoperative photo: A 0.8 x 0.9 sized schwannoma, pathologically confirmed.

#### Declarations

Acknowledgement: None.

Conflict of interest: No conflict of interest

**Consent:** Written informed consent has been obtained from the patient.

#### References

- Aoyama Y, Miyamoto A, Fujii T, Fujimori S, Tamaoka M, et al. Primary bronchial schwannoma: A case report. Medicine (Baltimore). 2022; 101: e31062.
- 2. Rockwell GM, Thoma A, Salama S. Schwannoma of the hand and wrist. Plast Reconstr Surg. 2003; 111: 1227-1232.
- Lee SJ, Yoon ST. Ultrasonographic and Clinical Characteristics of Schwannoma of the Hand. Clin Orthop Surg. 2017; 9: 91-95.