with mutations in KRT6A have more extensive disease compared with patients who have mutations in KRT16. Br J Dermatol 2012;166:875-878.
3. Samuelov L, Smith FJD, Hansen CD, Sprecher E. Revisiting pachyonychia congenita: a case-cohort study of 815 patients. Br J Dermatol 2020;182:738-746.
4. Goldberg I, Fruchter D, Meilick A, Schwartz ME, Sprecher E. Best treatment practices for pachyonychia congenita. J Eur Acad Dermatol Venereol 2014;28:279-285.
5. Gruber R, Edlinger M, Kaspar RL, Hansen CD, Leachman S, Milstone LM, et al. An appraisal of oral retinoids in the treatment of pachyonychia congenita. J Am Acad Dermatol 2012;66:e193-e199.

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Myopericytoma of the Finger: A Case Report and Literature Review

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Dear Editor:

Myopericytoma is an uncommon type of soft tissue tumor that shows a well-circumscribed, unencapsulated nodular proliferation with thin-walled vessels and a concentric, perivascular arrangement of ovoid spindle-shaped myopericytes. Clinically, most myopericytomas present as painless, slow-growing tumors in the superficial or deep soft tissues[1]. Myopericytomas most commonly affect the lower extremities and rarely occur on the fingers. Here, we report the case of a patient with myopericytoma located on the left third finger.

Our patient was a 66-year-old female who presented to the clinic with painful soft tissue masses on the palmar aspect of her left third finger. She was otherwise healthy and had no history of trauma.

On examination of her left finger, a 5-mm-sized, semifirm, round, soft tissue mass was observed (Fig. 1). The mass was mildly tender to palpation but did not fluctuate. There were no neurological or peripheral vascular abnormalities on the physical examination, and her range of motion was within normal limits. An excisional biopsy was then performed in the outpatient clinic. No deep attachments or stalks were noted.

Pathologic analysis of the lesion revealed that the soft tissue mass had multilayered, concentric perivascular cell growth, and showed an oval-to-spindle-shaped cellular architecture with abundant eosinophilic cytoplasm and an indistinct cellular border. Immunohistochemical staining was positive for smooth muscle actin (Fig. 1). These findings led to the diagnosis of myopericytoma. During the one- year follow-up, she has not reported recurrence of the mass.

Myopericytomas are most commonly located in the lower extremities, although they can occur in other locations, including the proximal extremities, head, neck, lungs, muscle, and bone[2]. Our present case is consistent with previous observations of myopericytomas, such as that they are relatively well-circumscribed but unencapsulated tumors that consist of spindle-shaped cells with a concentric perivascular growth pattern

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and positive immunohistochemical staining for smooth muscle actin. Although myopericytoma have some histological overlap with angioleiomyoma, they can be distinguished through histologic feature of characteristic perivascular concentric arrangement of tumor cells and clinical symptoms of little pain.

Few case reports have discussed myopericytomas on the finger. A total of 15 myopericytoma cases have been reported in Korea, none of which occurred on the finger. A total of seven cases of myopericytoma on the finger were found worldwide using the PubMed and Google Scholar databases (Table 1)[2-5]. As previously known, there was a male predilection.

Common soft tissue masses of the finger include ganglia, giant cell tumors of the tendon sheath, nerve sheath tumors, and glomus tumors. To the best of our knowledge, this is the first reported case in Korea of myopericytoma occurring on the finger. Clinicians must consider this tumor as a differential diagnosis for masses of the fingers.

In addition, Park et al.[1] found a predominance of female

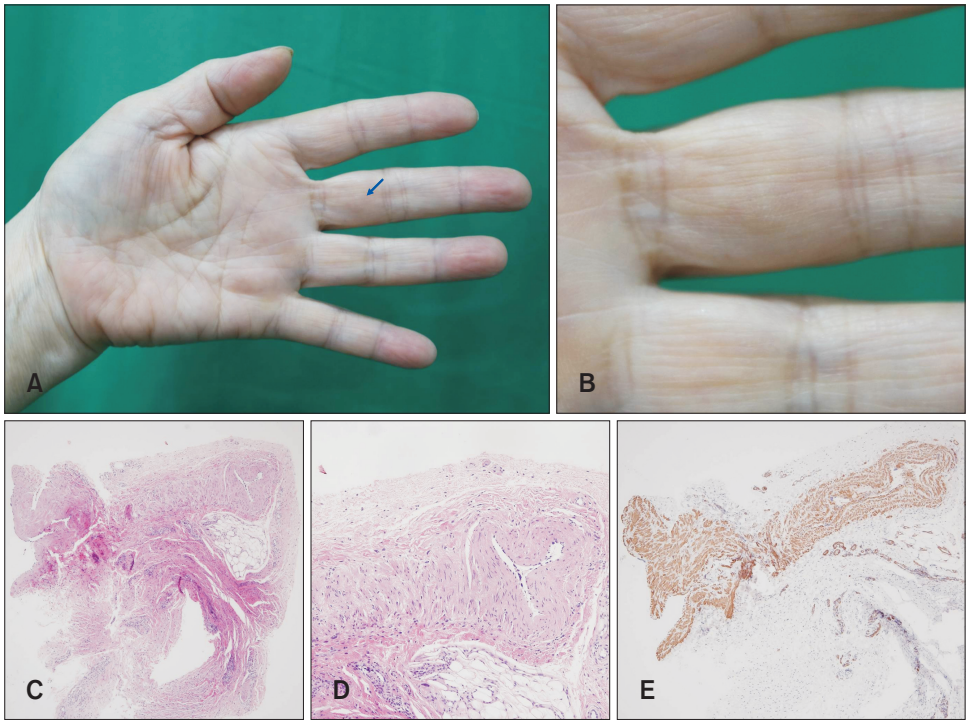

Fig. 1. (A, B) Solitary raised 0.5 cm-sized subcutaneous mass on the third finger (arrow) of the left hand. (C, D) Multilayered, concentric perivascular growth of the tumor cells. The tumor cells are plump and spindle-shaped or ovoid with eosinophilic cytoplasm. Mitoses and cytologic atypia are rare. (C: H&E, ×40; D: H&E, ×100). (E) Immunohistochemical stain for smooth muscle actin highlighting the concentric perivascular growth of the neoplastic pericytes. (E: smooth muscle actin stain, ×100). We received the patient's consent form about publishing all photographic materials.

Table 1. Literature review of cases of finger myopericytoma

Author	Age	Sex	Site	Number	Size	Depth	Symptom	Treatment	Recurrence	Immunohistochemistry
Mentzel et al.[2]	55	M	Finger	1	NA	Subcutis	NA	Excision	Unknown	NA
Mentzel et al.[2]	13	F	Finger	1	NA	Dermis	NA	Excision	Unknown	NA
Mentzel et al.[2]	52	M	Finger	1	NA	Subcutis	NA	Excision	Unknown	NA
Mentzel et al.[2]	62	M	Finger	1	NA	Subcutis	NA	Excision	Unknown	NA
Sadahira et al.[3]	70	M	Periungual	3	5 mm	Subcutis	NA	Observation	No	Smooth muscle actin, vimentin, muscle-specific actin (HHF35)
Mahapatra et al.[4]	59	F	Digital artery	1	5 mm	Intravascular	Pain	Excision	No	Smooth muscle actin, H-caldesmon
Morzycki et al.[5]	33	M	Finger	1	NA	Subcutis	Asymptomatic	Excision	No	Smooth muscle actin, vimentin
Present case	66	F	Finger	1	5 mm	Dermis	Asymptomatic	Excision	No	Smooth muscle actin

F: female, M: male, NA: not applicable.

cases of myopericytoma in Korea, contrary to known predilections. The authors speculated that this neoplasm may have racial characteristics. Our case is also a report of this rare tumor in female, thus enhancing its relevance.

CONFLICTS OF INTEREST

The authors have nothing to disclose.

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REFERENCES

1. Park SJ, Jeong GJ, Park JW, Hong JY, Park KY, Seo SJ. A case of myopericytoma and review of Korean literature. Korean J Dermatol 2020;58:558-562.
2. Mentzel T, Dei Tos AP, Sapi Z, Kutzner H. Myopericytoma of skin and soft tissues: clinicopathologic and immunohistochemical study of 54 cases. Am J Surg Pathol 2006;30:104-113.
3. Sadahira C, Yoneda K, Moriue T, Takai I, Kushida Y, Haba R, et al. Periungual myopericytoma. J Am Acad Dermatol 2006;54:1107-1108.
4. Mahapatra P, Dunne J, Colville RJ. Digital artery intravascular myopericytoma: a rare cause of a painful finger. J Hand Surg Eur Vol 2015;40:753-754.
5. Morzycki A, Joukhadar N, Murphy A, Williams J. Digital myopericytoma: a case report and systematic literature review. J Hand Microsurg 2017;9:32-36.