INTRODUCTION
Schwannoma, also known as neurilemmoma, is a benign peripheral nerve sheath tumour derived from schwann cells. It is the most common solitary tumour of the peripheral nerve. Schwannoma has subgroups and approximately 10% of cases are cellular schwannoma. The clinical presentation of cellular schwannomas and classic schwannomas are the same. However, hypercellularity, often nuclear hyperchromasia, and nuclear atypia are observed in their histological structures. Especially due to hypercellularity and increased mitotic activity, they may be inadvertently diagnosed as malignant tumour. Cellular schwannomas are benign, but recurrences may occur particularly in spinal location. Cellular schwannoma has not been reported to run a malignant course clinically and cause metastasis. Generally, they are observed at paravertebral, pelvic, retroperitoneal, or mediastinal location.

In this report, cellular schwannoma occurring on a foot phalanx location which does not exist in the literature, was presented.

CASE REPORT
A 23 years male patient presented with complaints of a growing, painful mass at the level of third toe of the right foot. The mass, which had begun to grow for 6 months and become painful, has been present for approximately 2 years. On physical examination, a 3 x 2 cm painful, non-fluctuating mass with a hard consistency was palpated at the dorsal region of the proximal phalanx of the right third toe. Bone destruction was seen on radiography and MR imaging. Curettage after excision and grafting were performed. No complication was seen after surgery. The histopathology result was reported as cellular schwannoma. It was an atypical location for cellular schwannoma not previously described in literature.

Key Words: Cellular schwannoma. Third toe foot. Phalanx. Pathology.
Cellular schwannoma

DISCUSSION

The schwannoma, which is a peripheral nerve sheath tumour, may be derived from any peripheral nerve. The clinical presentation of cellular schwannomas and classic schwannomas are the same.3,4 Schwannomas are typically benign, painless, slow-growing, isolated, rigid, round soft tissue tumours.1 This case had most of these properties except for prominent pain. Tarsal tunnel syndrome case can result from the posterior tibial nerve compression due to schwannoma. There is a case reported to be located at fibular diaphysis in paediatric age.6 Only 12 schwannoma have been reported at foot. Nath et al. have made excision for a patient with an ulcerated wound at big toe and the diagnosis was defined as schwannoma.7 In another case, Ocguder et al. defined a growing mass at the big toe of the foot and the histopathological diagnosis was a schwannoma.8 Nevertheless, foot phalangeal cellular schwannoma has not been reported in the literature. In the present case, the lesion was observed at the level of third toe of the right foot and caused destruction at the phalanx. Schwannoma located at a bone surface may cause surface erosion and scalloping; on MRI, it shows low signal on T1 and high signal on T2 weighted images.9 MRI is useful in diagnosis, but it is impossible to distinguish neurilemmoma from neurofibroma or malignant peripheral nerve sheath tumour.1 In this case, the radiological diagnostic methods were not helpful for the diagnosis, therefore, histopathological diagnosis were required. Two histological types are observed in schwannomas. In Antoni-A pattern, spindle cells are often seen and aligned in parallel; in Antoni-B pattern, long or oval nuclei related with cytoplasm were seen. In Antoni-A pattern, hyper-cellular areas are widespread. In Antoni-B pattern, hypo-cellular areas formed by a small number of pleomorphic cells are dominant. Both two patterns are usually seen together. S-100 protein-positivity is an immunohistochemical reagent demonstrate that the mass was derived from schwann cells.7 The histopathological findings seen in the classic schwannoma are also observed in the cellular schwannoma. The distinctive features are hypercellularity and increased mitotic activity without an aplastic changes. Antoni-A areas are seen as dominant. There are fascicle formed by elongated tumour cells. Antoni-B area is seen in less than 10%. Nuclear hyperchromasia, pleomorphism, mild or moderate mitotic activity is observed.3 The surgery includes excision with intraneural dissection and protection of nerve fascicle and tumour enucleation.10 Transient paresthesias may occur following excision, but permanent neurological damage or tumour recurrence is rare.1 In this case, after removal of the tumour, sensory disturbances did not develop.

REFERENCES