


CASE VIDEO

Walking ability after resection of soft tissue sarcoma of the thigh and the sciatic nerve

Mizuki Isobe¹ | Michiyuki Hakozaiki^{1,2}  | Yoichi Kaneuchi¹ | Itaru Ogawa¹ | Takeo Suzuki¹ | Nobuyuki Sasaki¹ | Takuya Kameda¹ | Yoshihiro Matsumoto¹

¹Department of Orthopaedic Surgery, Fukushima Medical University School of Medicine, Fukushima, Japan

²Higashi-Shirakawa Orthopaedic Academy, Fukushima Medical University School of Medicine, Fukushima, Japan

Correspondence

Michiyuki Hakozaiki, Department of Orthopaedic Surgery, Fukushima Medical University School of Medicine, 1 Hikarigaoka, Fukushima-shi, Fukushima 960-1295, Japan.
Email: paco@fmu.ac.jp

Key Clinical Message

Walking ability may be fairly well maintained after sciatic nerve resection combined with wide resection of soft tissue sarcoma, therefore, surgeons should not hesitate to perform sciatic nerve resection to achieve an adequate surgical margin.

KEYWORDS

limb function, sciatic nerve resection, soft tissue sarcoma, walking ability, wide resection

1 | CASE PRESENTATION

A 59-year-old man with dedifferentiated liposarcoma in the right thigh involving the sciatic nerve underwent surgery (Figure 1A), during which the sciatic nerve was resected with the tumor to archive an adequate margin (Figure 1B,C). Two years postoperatively, he was able to walk outside with a T-cane and ankle-foot orthosis (Video S1), and his Enneking

limb function score¹ was 63%. Manual muscle testing of the right lower extremity revealed that knee extension strength was rated 5/5, but dorsal and plantar flexion strength of the ankle and extension and flexion strength of the toes were rated 0/5. The right dorsal and plantar foot sensations showed hypesthesia and anesthesia, respectively.

There have been few reports describing walking ability after sciatic nerve resection.² Because local tumor control

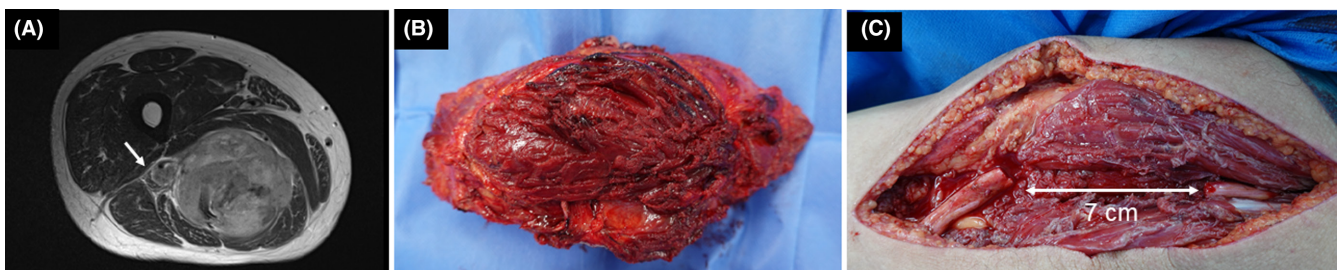


FIGURE 1 Preoperative T2-weighted magnetic resonance imaging of the right thigh revealing a huge soft tissue tumor, involving the sciatic nerve (arrow) (A). Plain photographs after the wide resection of the tumor and sciatic nerve (B) showing 7 cm of sciatic nerve defect (C).

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is essential in treating soft tissue sarcomas, and walking ability may be fairly well maintained, surgeons should not hesitate to perform sciatic nerve resection to achieve an adequate surgical margin.

AUTHOR CONTRIBUTIONS

Mizuki Isobe: Data curation; writing – original draft. **Michiyuki Hakozaiki:** Conceptualization; data curation; methodology; writing – original draft; writing – review and editing. **Yoichi Kaneuchi:** Supervision; validation; writing – review and editing. **Itaru Ogawa:** Validation; writing – review and editing. **Takeo Suzuki:** Validation; writing – review and editing. **Nobuyuki Sasaki:** Data curation; validation; writing – review and editing. **Takuya Kameda:** Data curation; validation; writing – review and editing. **Yoshihiro Matsumoto:** Supervision; validation; writing – review and editing.

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CONFLICT OF INTEREST STATEMENT

The authors have no conflicts of interest to report.

DATA AVAILABILITY STATEMENT

All data supporting the findings are available within the manuscript.

ETHICS STATEMENT

At our institution, case reports do not require Ethics Review Committee approval.

CONSENT

Written informed consent was obtained from the patient to publish this report in accordance with the journal's patient consent policy.

ORCID

Michiyuki Hakozaiki  <https://orcid.org/0000-0003-1641-0795>

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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