

EP-201

악성 연부조직 종양으로 오인된 피하 비후성 흉터: 진단적 함정 및 증례 보고

(Subcutaneous Hypertrophic Scar Mimicking a Malignant Soft Tissue Tumor: A Diagnostic Pitfall and Case Report )



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**Background:** Subcutaneous masses with rapid recurrence and aggressive radiological features typically raise the high suspicion of malignant soft tissue sarcomas or borderline tumors like nodular fasciitis. However, exaggerated internal scarring can present identically. We report a massive subcutaneous pseudotumor likely triggered by deep venous injury and organizing fibrosis.

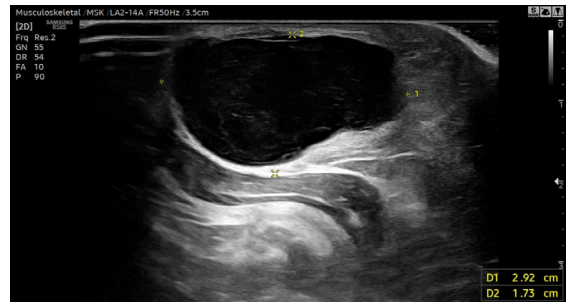
**Case presentation:** A 25-year-old male presented with a rapidly recurring hard mass on the right popliteal area, one month post-excision. (Fig. 1.) Preoperative magnetic resonance imaging (MRI) revealed a 2.6 cm-sized soft tissue mass with a lobulated margin and suspected diffuse attachment to the superficial fascia. (Fig. 2.) Ultrasonography demonstrated a hypoechoic mass with internal vascularity and high stiffness on elastography, strongly suggesting a malignant soft tissue tumor. (Fig. 3.) During re-excision, the mass exhibited vague margins, a ruptured fluid collection, and densely enveloped the small saphenous vein, requiring careful ligation.

**Pathological Findings and Outcome:** Histopathology confirmed a hypertrophic scar with extensive myxoid degeneration and fat necrosis. We hypothesize that unrecognized popliteal venous injury caused localized fluid collection, triggering an exaggerated cascade of organizing fibrosis. When internal scar tissue began regrowing one month postoperatively, we initiated intralesional triamcinolone injections. Due to its aggressive fibrotic nature, we plan to incorporate 5-fluorouracil (5-FU) therapy to suppress fibroblast proliferation.

**Conclusion:** Deep subcutaneous hypertrophic scars driven by organizing fibrosis can clinically and radiologically mimic soft tissue sarcomas. Surgeons should suspect pseudotumors in rapidly recurring post-surgical masses and consider multimodal conservative management, including steroid and 5-FU injections, to prevent unnecessary surgical morbidity.



**Fig. 1.** Preoperative clinical photograph of the right posterior thigh. A distinctly protruding subcutaneous mass is observed adjacent to the previous excision scar. The prominent nodular bulging and palpable firmness of the lesion clinically mimicked a soft tissue tumor, raising a high index of suspicion for malignancy prior to the re-excision.



**Fig. 2.** Ultrasonography presents hypoechoic mass with lobulated margin, measuring 2.9x1.7x3.6 cm, with suspicious internal vascularity and perilesional inflammatory change. Impression : Malignant soft tissue is possible, DDx: nodular fasciitis, neurogenic tumor.



**Fig. 3.** Knee MRI study showed soft tissue mass with lobulated margin at the subcutaneous layer. Suspected diffuse attachment with superficial fascia was noted. Impression : Malignant soft tissue is possible, DDx: nodular fasciitis, neurogenic tumor.