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l, (Erythrocyte sedimentation rate)가 120
mm 가 , (tibial
nerve) (peroneal nerve)

가 , 가
(1-5).

가 , 가

가

가

가 (1-3).

가 MR

1 MR

resonance: MR)
tomography: CT)

(Magnetic
(Computed

(soleus muscle), (gastrocnemius muscle),
(tibialis posterior muscle), (popliteus muscle),
가 (flexor digitorum longus muscle),
(flexor hallucis longus muscle) -

MR CT

가

가

가 가 (Fig. 1A - C). T2

75 가

T1

가

- (tibialis anterior muscle), 가
(extensor digitorum longus muscle), (extensor
hallucis longus muscle), (fibularis tertius
muscle)- 가

159 mg/dL 가

가 $1.71 \times 10^9/\mu$

MR

(popliteal

artery)

(popliteal vein)

(sciatic nerve)

가

1 가

2007 6 29

2007 8 1

(Fig. 1D).

(poliomyelitis), (anterior horn cell) ,
(1 - 4).
(masseter muscle) (1 - 4).
(1, 3, 4).
(1 - 5).

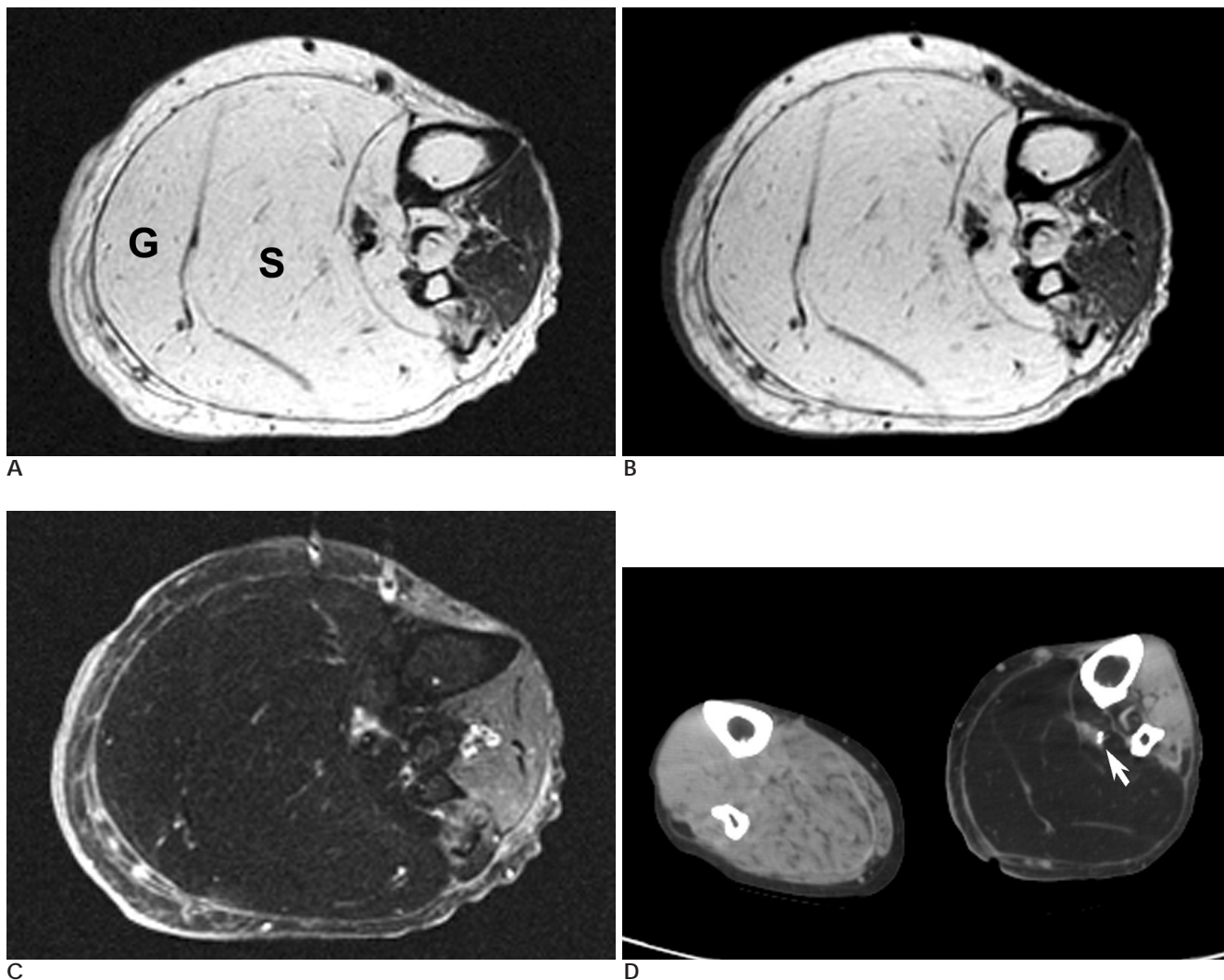


Fig. 1. Calf pseudohypertrophy in a 75-year-old woman with diabetic neuropathy. **A-C.** Axial T1 weighted (**A**) and T2 weighted (**B**) MR images show diffuse fatty replacement of the muscles in posterior compartment and enlargement of the soleus (S) and gastrocnemius muscles (G) with scanty muscle fibers. Intermuscular fasciae and tendons are normally visualized. Atrophic change of the muscles in anterior compartment is also seen. The fat-suppressed T2-weighted MR image (**C**) reveals subcutaneous edema without increased signal intensity within the muscles. **D.** The axial CT image shows enlarged circumference of left lower leg compared with the right. Note enlargement of the soleus and gastrocnemius muscles with diffuse fatty replacement. Nodular calcification is seen in the left tibial nerve (arrow).

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CT
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MR
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CT
MR
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Pseudohypertrophy of the Calf Muscles in a Patient with Diabetic Neuropathy: A Case Report¹

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Partial or complete loss of innervation of skeletal muscle leads to muscle weakness and atrophic changes, resulting in decreased muscle volume with fatty replacement. Rarely, enlargement of the affected muscle may occur, related to two processes: true hypertrophy and pseudohypertrophy. We report CT and MR findings of the pseudohypertrophy of calf muscles, especially the soleus and gastrocnemius muscles, in a patient with diabetic neuropathy that showed increased muscle volume with diffuse fatty replacement and the presence of scanty muscle fibers.

Index words : Muscle, hypertrophy
Muscle, magnetic resonance imaging
Diabetic neuropathies

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