Intramuscular Ganglion in Gastrocnemius A Case Report

by

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Introduction

Ganglion appears often at the dorsal site of a wrist joint. In the following is presented a case of ganglion originating in the medial gastrocnemius tendon at the right popliteal region. The ganglion grew into the medial head of gastrocnemius muscle, an intramuscular solid tumor was suspected.

Case: Female, 62 years old.

Chief complaint: Right knee pain and tumor at the medial site of the right calf.

Past history: She was administered medicine for shizophrenia at another hospital.

Present illness: In May, 1992, she felt pain at the medial site of the right knee and noted a tumor near the region of pain.

Physical findings: The tumor was 4×3cm in the medial head of gastrocnemius muscle, with a clearly defined border. Its surface was smooth ; it could be moved without adhesion to the skin and or bone and showed elastic hardness. No tenderness or pain was felt at the site of the lesion. The general condition, was normal except for slow-wittedness due to shizophrenia or medication.

Radiological findings: Plain X-ray showed no tumor shadow. In MRI, T1-weighted image showed low signal intensity (same as blood) and T2-weighted image indicated high signal intensity. In the axial view, a round shaped shadow was observed in the medial muscle belly of the gastrocnemius and the tumor appeared to consist of multiple segments. In the saggital view, a strange shadow, like a ginger, was seen from the most proximal site of the gastrocnemius, extending 10cm distal. The boundary of the shadow was quite clear. A cyst like lesion (ex. ganglion) was suspected for the most part based on MRI findings.

Findings at operation: A tumor excision was conducted on May 26th, 1992. After an incision of about 6cm on the skin and dividing muscle fibers, a tumor (2×3×8cm) alongwith a multiple daughter tumor possessing a white capsula were evident. The capsula adhered tightly to the muscle fibers and consequently jellatinous material flowed out due to destruction of the capsula when the tumor was stripped. The tumor was diagnosed as a ganglion. The proximal site of the ganglion tapered gradually and was connected to the medial tendon of the gastrocnemius. After fastening the stem, the tumor was excised.

Fig. 1 : (a) T1-weighted image. Low signal intensity is observed.

(b) T2-weighted image. High signal intensity is evident.

On both images, the shadow has a strange form such as that of a ginger.

Pathological findings: No lining cells covering the inner surface of the cyst were observed. Hyalinized connective tissue comprised the cyst wall. Micropathological findings supported the diagnosis of a ganglion.

Discussion

Ganglion occurs often at the dorsal site of a wrist joint. Since ganglions in calf muscle have been reported^{(1)~(4)}. At first, the lesion was seen in the profound position of the calf, a solid soft tumor was suspected. But MRI suggested the tumor to consist of water or similar substance. The tumor was subsequently considered to consist of multiple segments having a strange form. This lesion was concluded to probably be a cyst-like lesion such as a ganglion and thus marginal excision was decided on as the Choice of treatment. MRI was useful for diagnosis and therapy in the present case.

Conclusions

A rare case of ganglion in gastrocnemius was encountered. The ganglion originated in the medial

tendon of gastrocnemius. For diagnosis and the therapy, MRI was quite usefull.

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腓腹筋内に発育したガングリオンの1例

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膝関節部の内側腓腹筋腱より発生し、腓腹筋内側頭内に発育した、比較的まれなガングリオンの1例を報告した。当初筋肉内の充実性腫瘍を疑わせたが、MRI検査によってガングリオンのようなう腫性病変であ

ることが示唆され、かつ筋肉内での病変のひろがりがあきらかにされた。この腫瘍の診断と治療にあたってMRIは有用であった。