Right Upper Arm Lymphedema Secondary to Exercise-related Rhabdomyolysis

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A previously healthy, 19-year-old woman presented with right upper arm swelling that had persisted for 2 days (Picture 1). An upper limb examination revealed non-pitting edema without warmth, tenderness, or skin discoloration. Ultrasonography showed no occlusion distal to the subclavian vessels, but the subcutaneous tissue was thicker than that in the healthy arm. Swelling was attributed to lymphatic edema. Hematology revealed elevated creatine kinase levels (3,525 U/L). The patient reported that she had performed several push-ups 8 days previously. Thus, exercise-induced rhabdomyolysis was diagnosed. Magnetic resonance imaging revealed a swollen triceps brachii. T2-weighted imaging and short-T1 inversion recovery imaging showed areas of high-signal intensity in the medial and lateral heads (Picture 2). Lymphatic edema may have resulted from compression of the adjacent lymphatic vessels by the swollen triceps brachii. Six days after the initial examination, her arm swelling resolved and creatine kinase levels normalized. Even exercise that is not considered excessive can cause rhabdomyolysis, which may lead to transient lymphedema.

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