

## Refractory rhabdomyolysis caused by malignant tumor-associated polymyositis

양산부산대학교병원 내과<sup>1</sup>김준영<sup>1</sup>, 김서린<sup>1</sup>

Rhabdomyolysis can be caused mainly by excessive exercise, trauma, electrolyte abnormalities, and some drugs. The main treatments are high-dose intravenous fluid therapy and renal replacement therapy, depending on the degree of kidney damage. We report a rare case of rhabdomyolysis in an elderly patient that did not respond to fluid therapy and was linked to a malignant tumor. A 68-year-old woman was admitted to the emergency room with general weakness that had begun 3 days ago. In blood tests, creatinine kinase (8000 U/L) and myoglobin (2466 ng/mL) were elevated, and myoglobinuria (urine myoglobin 2727 ng/mL) was accompanied, and she was diagnosed with rhabdomyolysis. In the past history, there were no probable causes such as exercise, trauma, suspected drug use, or electrolyte abnormalities. Serum creatinine was within the normal range. High-dose intravenous fluid therapy was administered for a week, but the muscle enzyme level did not improve, and she complained of progressively worsening proximal muscle weakness and swallowing difficulty. On whole-body MRI and bone scan, there were findings of rhabdomyolysis, involving both sides of the chest, abdomen, pelvis, buttocks, both thighs, and legs. The electrophysiological findings showed prolonged terminal latency and borderline compound muscle action potential amplitude in the left peroneal nerve, suggesting active myopathy. Abdominal and pelvic CT showed an enhancing solid mass at the right adnexa (4.4 cm) and irregular peritoneal thickening and a mass at the rectouterine fossa (2.2 cm), so laparoscopic total hysterectomy and bilateral salpingo-oophorectomy were performed. As a result of surgical biopsy, she was diagnosed with salpingeal cancer, which is metastatic in the abdominal cavity. Myositis was confirmed by a biopsy of the left biceps muscle. She was finally diagnosed with rhabdomyolysis, which was caused by malignant tumor-associated polymyositis. A dramatic improvement in rhabdomyolysis was observed after steroid pulse therapy. Therefore, when fluid treatment-refractory rhabdomyolysis of unknown cause is observed in older patients, it is important to look scrupulously for any hidden malignancy.

EMG

Side	Muscle	Nerve	Root	Ins Ac	Fl bs	Ps w	Am p	Du r	Pol y	Rec rt	Myoto mia	CR D	Myoly mia	Fascicula tion	Neuromyot onia
Rgt	1stDorInt	Ulnar	C8-T1	Inc r	1+	1+	Dec r	sho rt	0	Rap id	-	+	-	-	-
Rgt	ExtDigCo m	Radial (Post Int)	C7-8	N ml	1+	-	Dec r	sho rt	0	Rap id	-	+	-	-	-
Rgt	Biceps	Musculocut	C5-6	N ml	1+	1+	Dec r	sho rt	0	Rap id	-	+	-	-	-
Rgt	Triceps	Radial	C6-7-8	N ml	-	1+	Nm l	Nm l	0	Nml	-	-	-	-	-
Rgt	Deltoid	Axillary	C5-6	N ml	1+	1+	Dec r	sho rt	0	Rap id	-	+	-	-	-
Rgt	AntTibialis	Dp Br Peron	L4-5	N ml	1+	-	Nm l	Nm l	0	Nml	-	+	-	-	-
Rgt	MedGastro c	Tibial	S1-2	N ml	1+	-	Nm l	Nm l	0	Nml	-	+	-	-	-
Rgt	VastusLat	Femoral	L2-4	N ml	1+	-	Nm l	Nm l	0	Nml	-	+	-	-	-
Rgt	C7 Parasp	Rami	C7	N ml	-	-	Nm l	Nm l	0	Nml	-	-	-	-	-
Rgt	L4 Parasp	Rami	L4	N ml	1+	-	Nm l	Nm l	0	Nml	-	-	-	-	-
Rgt	T10 paraspinal	Rami	T10	N ml	-	-	Nm l	Nm l	0	Nml	-	+	-	-	-

