Letter to the Editor

Use of bisphosphonates for hypercalcemia in a child with alveolar rhabdomyosarcoma

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To the Editor,

Andıran et al.[1] reported two cases and a literature review on the use of pamidronate in oncology. We read with great interest the review and hoped to see some information and comments on the use of pamidronate in children with cancer. Since there are few data[2-5] regarding use of these agents in pediatric solid tumors, we herein summarize our experience and the other information from the literature.

Our patient was two years old and diagnosed as alveolar rhabdomyosarcoma, with the lesion being primary on the right leg. She received oncological treatment for six months, but developed metastatic disease, leading to the conclusion that the tumor was refractory to oncological treatment. When she was in terminal state, hypercalcemia occurred as a result of paraneoplastic syndrome. We started calcitonin (10 U/kg/day) infusion since the calcium level was 15 mg/dl. After 24 hours of calcitonin infusion, the serum level of calcium remained at 16.5 mg/dl. Since there were few data available regarding pamidronate dosage in children with cancer and since the calcium level of 16.5 mg/dl was similar to Andıran's report[1], we used a relatively low dose of pamidronate infusion of 4 mg total (0.1 mg/kg/dose), for four doses at 12-hour intervals. The serum level of calcium gradually decreased to 9 mg/dl. Pamidronate was used in four doses of 0.1 mg/kg and the serum calcium was normal at the end of the fourth pamidronate dose. There was no side effect related to pamidronate.

In conclusion, we agree that in children who have solid tumor with hypercalcemia, pamidronate usage is effective and useful.

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