Etidronate for the Treatment of Progressive Tumoral Calcification in Hemodialysis Patients

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The troublesome disorder of soft tissue tumoral calcification is often refractory to treatment and can lead to serious complications in uremic patients. The pathogenic process is thought to involve a high calcium-phosphorus product (Ca×P) and/or advanced secondary hyperparathyroidism after long-term hemodialysis (HD). A 39-year-old man was admitted to our hospital because of severe hip pain associated with rapidly progressive tumoral calcinosis less than 2 years after commencement of HD. He had renal osteodystrophy and a high Ca×P product (10.1×6.7=67.67), but no severe hyperparathyroidism (intact-PTH 67 pg/ml). X-ray and computer tomography (CT) of the hips showed extensive soft tissue tumoral calcinosis (Picture 1A). Tumoral calcification lesions appeared in many parts of the body and although they were subsequently removed surgically or medically using various medications, the effect was temporary. After informed consent, we treated the patient with intermittent cyclical disodium etidronate (400 mg/day for 14 days), for 8 cycles over a period of two years. Etidronate reduced the soft tissue tumoral calcinosis on X-ray and CT (Picture 1B), had no side effects and resulted in remission of the disease since discontinuation of etidronate. Our case suggests that
etidronate is a potentially useful agent for the treatment of tumoral calcinosis.