

## 부갑상선기능저하증 환자에서 발생한 칼리트리올과 칼슘 유발성 밀크 알칼리 증례

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### Milk Alkali Syndrome Induced by Calcitriol and Calcium Bicarbonate in a Patient with Hypoparathyroidism

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Since the first reports in the 1930s, milk-alkali syndrome (MAS) has become a well-known cause of hypercalcemia in combination with metabolic alkalosis and impairment of renal function after persistent ingestion of calcium carbonate and vitamin D. This syndrome was first recognized secondary to treatment of peptic ulcer disease with milk and absorbable alkali. Its incidence fell after the introduction of H2-blocker and proton pump inhibitors. However, recently MAS has risen to become the third major cause of hypercalcemia, after hyperparathyroidism and malignancy. We report the case of a patient presenting with hypercalcemia, metabolic alkalosis and renal failure secondary to treatment of idiopathic hypoparathyroidism. The patient was managed with withdrawal of calcium carbonate and vitamin D. He responded well to treatment, and calcium concentration, renal function and metabolic alkalosis normalized.

**Key Words:** 밀크알칼리증후군, 부갑상선기능저하증, 칼슘, 칼시트리올  
Milk alkali syndrome, Hypoparathyroidism, Calcium, Calcitriol