

ALUMINIUM ABSORPTION IN INFANCY

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Aluminium (Al) contamination of infant formulae is common (Simmer et al. 1990). Al absorption is generally believed to be minimal and that which is absorbed is readily excreted by the kidneys. It is not known whether infants absorb Al. We aimed to assess this by measuring plasma levels and urinary excretion after a low dose of the Al-containing antacid, Mylanta (54 mg / 5 ml). Mylanta is commonly prescribed in infancy for gastro-oesophageal reflux and colic.

Seven healthy infants were studied for a period of five days. Their gestational age was 36 ± 2 weeks and post natal age, 11 ± 5 days. Mylanta (one to two ml) was given with feeds on day two and three. Eight-hourly urine samples were collected and urine Al/creatinine ratio measured. Venous blood was collected for plasma Al and creatinine analysis at the end of days one, three and five.

Plasma Al increased and reached toxic levels after two days of Mylanta therapy (mean \pm SD ; 0.64 ± 0.33 $\mu\text{mol/dl}$ for day one vs 3.48 ± 2.86 $\mu\text{mol/dl}$ for day three , $P=0.029$) as did urine Al/creatinine ratio (mean \pm SD; 0.15 ± 0.17 for day one vs 2.42 ± 1.82 for day three, $P=0.015$).

These results demonstrate the absorption of Al from Mylanta and raise the concern of aluminium toxicity.

SIMMER, K. et al. (1990). *J. Paediatr. Child Health* 76: 9.

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