

INTER-RELATIONS BETWEEN B-TYPE NATRIURETIC PEPTIDES & VIT D IN PATIENTS ON MAINTENANCE PERITONEAL DIALYSIS & IN WOMEN POST-PARTUM

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The study was undertaken to observe relationships between plasma levels of the cardiac natriuretic peptides and vitamin D levels in patients on chronic peritoneal dialysis, and to document the effect of vitamin D administration on natriuretic peptide levels in lactating women who were vitamin D deficient.

Measurements were made of circulating levels of 25-hydroxyvitamin D, 1.25 (OH)D and plasma B-type natriuretic peptide levels in patients receiving chronic peritoneal dialysis, and before and after 2 months of vitamin D administration in lactating women.

Both BNP and NT-proBNP correlated inversely with 25(OH)D levels ($r=-0.60$, $p=0.007$ and $r=-0.64$, $p=0.03$, respectively), in patients on peritoneal dialysis. In lactating women, vitamin D administration reduced plasma NT-proBNP levels by 26%, ($P<0.001$).

In conclusion, vitamin D deficiency in chronic renal failure may impair cardiac function as manifested by elevated levels of cardiac natriuretic peptides. It is possible that vitamin D administration in those deficient in the vitamin may improve cardiac function as manifested by reduced circulating natriuretic peptide levels.