Cardiac Natriuretic Peptides: New Laboratory Parameters In Heart Failure Patients

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SUMMARY

Natriuretic peptides, atrial natriuretic peptide and brain natriuretic peptide, are key regulators in the homeostasis of salt and water excretion and in the maintenance of blood pressure. During heart failure, these peptides are highly activated because of volume overload and increased myocardial wall tension. Among all natriuretic peptides and neurohormones, brain natriuretic peptide and its N-terminal prohormone fragment have been shown to be the best markers to identify patients with heart failure. They are useful prognostic markers as well. The stability of brain natriuretic peptides and N-terminal prohormones in ethylene-diamine-tetraacetic-acid whole blood is sufficient for routine use. Sensitive and specific assays without the need for plasma extraction are commercially available. The available data indicate that natriuretic peptides are powerful diagnostic and prognostic markers in heart failure patients. First data on treatment guidance are promising. (Clin. Lab. 2001;47:265-277)