Atrial Natriuretic Factor - What's in a Name?

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Sir,

In 1785, William Withering, author of the famous treatise on digitalis *An Account of the Foxglove and Some of Its Medical Uses: With Practical Remarks on Dropsy and Other Diseases*, believed the effect of the drug to be primarily diuretic. Subsequent investigators, however, went on to show that the diuresis caused by digitalis was in fact secondary to its effects on the heart.

Atrial natriuretic factor (ANF) is a recently discovered endogenous hormone with a strong natriuretic potency [1]. In analogy to the effects of digitalis, natriuresis seems mainly to be enhanced by the action of ANF on the systemic circulation, particularly the renal circulation, and only to a much lesser extent by any direct effect on renal salt handling in tubular cells and collecting ducts [2]. Thus, natriuresis is for the most part secondary to changes in hemodynamics. Moreover, production of ANF is not limited to the heart alone; recent work has shown ANF to be produced as a neuropeptide/hormone in certain parts of the brain [3].

Centrally as well as peripherally, the action of ANF seems to be remarkably antagonistic to the effects of angiotensin [4]. If this broader concept of ANF as a functional counterpart of angiotensin in hormonal control of fluid balance is correct, we suggest, that renaming ANF angiorelaxin might help to put its role in a more proper perspective.

References

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