

Neuroendocrine Response in Heart Failure

Bibliography of One Hundred Key Papers

-
- Agnoletti G, Rodella A, Ferrari R, Harris P.** *Release of atrial natriuretic peptide-like immunoreactive material during stretching of the rat atrium.* **J Mol Cell Cardiol.** 1987;19:217-222.
-
- Anand IS.** *Pathogenesis of salt and water retention in the congestive heart failure syndrome. In: Poole-Wilson PA, Colucci WS, Massie BM, Chatterjee K, AJ Coats, eds.* **Heart Failure.** New York NY: Churchill Livingstone; 1997:155-172.
-
- Anand IS, Chandrashekhar Y.** *Reduced inhibition of endothelial-derived relaxing factor causes the hyperdynamic circulation of chronic severe anemia.* **Med Hypotheses.** 1993;41:225-228.
-
- Anand IS, Chandrashekhar Y, Ferrari R, et al.** *Pathogenesis of congestive state in chronic obstructive pulmonary disease. Studies of body water and sodium, renal function, hemodynamics, and plasma hormones during edema and after recovery.* **Circulation.** 1992;86:12-21.
-
- Anand IS, Chandrashekhar Y, Ferrari R, Poole-Wilson PA, Harris P.** *Pathogenesis of oedema in chronic anaemia: studies of body water and sodium, renal function, haemodynamics and plasma hormones.* **Br Heart J.** 1993;70:357-362.
-
- Anand IS, Chugh SS.** *Mechanisms and management of renal dysfunction in heart failure.* **Curr Opin Cardiol.** 1997;12:251-258.
-
- Anand IS, Ferrari R, Kalra GS, Wahi PL, Poole-Wilson PA, Harris P.** *Edema of cardiac origin. Studies of body water and sodium, renal function, hemodynamic indexes, and plasma hormones in untreated congestive cardiac failure.* **Circulation.** 1989;80:299-305.
-
- Anand IS, Ferrari R, Kalra GS, Wahi PL, Poole-Wilson PA, Harris P.** *Pathogenesis of edema in constrictive pericarditis.* **Circulation.** 1991;83:1880-1887.
-
- Anand IS, Gurden J, Wander GS, et al.** *Cardiovascular and hormonal effects of calcitonin gene-related peptide in congestive heart failure.* **J Am Coll Cardiol.** 1991;17:208-217.
-
- Anand IS, Kalra GS, Ferrari R, Wahi PL, Harris P, Poole-Wilson PA.** *Hemodynamic, hormonal, and renal effects of atrial natriuretic peptide in untreated congestive heart failure.* **Am Heart J.** 1989;118:500-505.
-
- Anker SD, Chua TP, Ponikowaki P, et al.** *Hormonal changes and catabolic/anabolic imbalance in chronic heart failure and their importance in cardiac cachexia.* **Circulation.** 1997;96:526-534.
-

Bibliography of One Hundred Key Papers

- Bayliss J, Norell M, Canepa-Anson R, Sutton G, Poole-Wilson PA. *Clinical and neuroendocrine effects of introducing diuretics.* **Br Heart J.** 1987;57:17-22.
-
- Burnett JC Jr, Kao PC, Hu DC, et al. *Atrial natriuretic peptide in congestive heart failure in the human.* **Science.** 1986;231:1145-1147.
-
- Cavero PG, Margulies KB, Winaver J, Seymour AA, Delaney NG, Burnett JC Jr. *Cardiorenal actions of neutral endopeptidase inhibition in experimental congestive heart failure.* **Circulation.** 1990;82:196-201.
-
- Chandrashekhar Y, Anand IS, Sarma PVR, Ferrari R, Wahi PL, Poole-Wilson PA. *Effect of prolonged infusion of calcitonin gene-related peptide on the hemodynamics, renal blood flow and hormone levels in patients with congestive heart failure.* **Am J Cardiol.** 1991;67:732-736.
-
- Chidsey CA, Harrison DC, Braunwald E. *Augmentation of the plasma norepinephrine response to exercise in patients with congestive heart failure.* **N Engl J Med.** 1962;267:650-655.
-
- Cody JR, Atlas SA, Laragh JH, et al. *Atrial natriuretic factor in normal subjects and heart failure patients.* **J Clin Invest.** 1986;78:1362-1374.
-
- Cohn JN. *Is neurohormonal activation deleterious to the long-term outcome of patients with congestive heart failure? III. Antagonist's viewpoint.* **J Am Coll Cardiol.** 1988;12:554-558.
-
- Cohn JN, Johnson GR, Shabetai R, et al. *Ejection fraction, peak exercise oxygen consumption, cardiothoracic ratio, ventricular arrhythmias, and plasma norepinephrine as determinants of prognosis in heart failure. The V-HeFT VA Cooperative Studies Group.* **Circulation.** 1993;87(suppl 6):VI5-VI16.
-
- Cohn JN, Johnson G, Ziesche S, et al. *A comparison of enalapril with hydralazine-isosorbide dinitrate in the treatment of chronic congestive heart failure.* **N Engl J Med.** 1991;325:303-310.
-
- Cohn JN, Levine TB, Olivari MT, et al. *Plasma norepinephrine as a guide to prognosis in patients with congestive heart failure.* **N Engl J Med.** 1984;311:819-823.
-
- CONSENSUS Trial Study Group. *Effects of enalapril on mortality in severe congestive heart failure. Results of the Cooperative North Scandinavian Enalapril Survival Study (CONSENSUS).* **N Engl J Med.** 1987;316:1429-1435.
-
- Cowie MR, Struthers AD, Wood DA, Coats AJS, Thompson SG, Poole-Wilson PA. *Value of natriuretic peptides in assessment of patients with possible new heart failure in primary care.* **Lancet.** 1997;350:1349-1353.
-
- Cowley AW, Quillen EW, Skelton MM. *Role of vasopressin in cardiovascular regulation.* **Fed Proc.** 1983;42:3170-3176.
-
- Davis JO. *The control of renin release.* **Am J Med.** 1973;55:333-350.
-
- Davis JO, Freeman RH. *Mechanisms regulating renin release.* **Physiol Rev.** 1976;56:1-56.
-



-
- De Bold AJ.** *Heart atria granularity effects of changes in water-electrolyte balance.*
Proc Soc Exp Biol Med. 1979;161:508-511.
-
- De Bold AJ, Borenstein HB, Veress AT, Sonnenberg H.** *A rapid and potent natriuretic response to intravenous injection of atrial myocardial extract in rats.*
Life Sci. 1981;28:89-94.
-
- Dzau VJ.** *Significance of vascular renin angiotensin pathways.*
Hypertension. 1986;8:553-559.
-
- Dzau VJ, Colucci WS, Hollenberg NK, William GH.** *Relation of the renin-angiotensin-aldosterone system to clinical state in congestive heart failure.*
Circulation. 1981;63:645-651.
-
- Dzau VJ, Colucci WS, Williams GH, Curfman G, Meggs L, Hollenberg N.** *Sustained effectiveness of converting enzyme inhibition in patients with severe congestive heart failure.*
N Engl J Med. 1980;302:1373-1379.
-
- Dzau VJ, Packer M, Lilly LS, Swartz S, Hollenberg N, Williams G.** *Prostaglandins in severe congestive heart failure.*
N Engl J Med. 1984;310:347-352.
-
- Edwards BS, Rodeheffer RJ, Reeder GS, Burnett JC Jr.** *Expression of atrial natriuretic factor in the human ventricle is independent of chamber dilation [see comments].*
J Am Coll Cardiol. 1990;16:1589-1593.
-
- Elsner D, Muntze A, Kromer EP, Riegger GAJ.** *Effectiveness of endopeptidase inhibition (candoxatril) in congestive heart failure.*
Am J Cardiol. 1992;70:494-498.
-
- Fazio S, Sabatini L, Capaldo B, et al.** *A preliminary study of growth hormone in the treatment of dilated cardiomyopathy.*
N Engl J Med. 1996;334:809-814.
-
- Ferrari R, Ceconi C, De Guili F, Panzail A, Harris P.** *Temporal relations of the endocrine response to hypotension with sodium nitroprusside.*
Cardioscience. 1992;3:51-60.
-
- Ferrari R, Ceconi C, Rodella A, De Giuli F, Panzali A, Harris P.** *Temporal relations of the endocrine response to exercise.*
Cardioscience. 1991;2:131-139.
-
- Ferrari R, Ceconi C, Rodella A, Harris P, Visioli O.** *Hormonal response in untreated myocardial infarction.*
Cardioscience. 1990;1:55-60.
-
- Ferrari R, Panzali AF, Poole-Wilson PA, Anand IS.** *Plasma CGRP-like immunoreactivity in treated and untreated congestive heart failure.*
Lancet. 1991;338:1084.
-
- Francis GS, Benedict C, Johnstone DE, et al.** *Comparison of neuroendocrine activation in patients with left ventricular dysfunction with and without congestive heart failure. A substudy of the Studies of Left Ventricular Dysfunction (SOLVD).*
Circulation. 1990;82:1724-1729.
-
- Francis GS, Cohn JN.** *The autonomic nervous system in congestive heart failure.*
Annu Rev Med. 1986;37:235-247.
-

Bibliography of One Hundred Key Papers

- Francis GS, Cohn JN, Johnson G, Rector TS, Goldman S, Simon A.** *Plasma norepinephrine, plasma renin activity, and congestive heart failure. Relations to survival and the effects of therapy in V-HeFT II.*
Circulation. 1993;87:(suppl 6):VI40-VI48.
-
- Francis GS, Rector TS, Cohn JN.** *Sequential neurohumoral measurements in patients with congestive heart failure.*
Am Heart J. 1988;116:1464-1468.
-
- Frustaci A, Gentiloni N, Russo MA.** *Growth hormone in the treatment of dilated cardiomyopathy.*
N Engl J Med. 1996;335:672-673.
-
- Goldsmith SR, Francis GS, AW Cowley, Levine T, Cohn J.** *Increased plasma arginine vasopressin levels in patients with congestive heart failure.*
J Am Coll Cardiol. 1983;1:1385-1390.
-
- Goldsmith SR, Francis GS, Cowley AW, Jr, Goldenberg IF, Cohn JN.** *Hemodynamic effects of infused arginine vasopressin in congestive heart failure.*
J Am Coll Cardiol. 1986;8:779-783.
-
- Goldsmith SR, Francis GS, Cohn JN.** *Effect of head-down tilt on basal plasma norepinephrine and renin activity in humans.*
J Appl Physiol. 1985;59:1068-1071.
-
- Gottlieb SS, Kukin ML, Ahern D, Packer M.** *Prognostic importance of atrial natriuretic peptide in patients with chronic heart failure.*
J Am Coll Cardiol. 1989;13:1534-1539.
-
- Gottlieb SS, Robinson S, Krichthen CM, Fisher ML.** *Renal response to indomethacin in congestive heart failure secondary to ischemic or idiopathic dilated cardiomyopathy.*
Am J Cardiol. 1992;70:890-893.
-
- Harris P.** *Evolution and the cardiac patient.*
Cardiovasc Res. 1983;17:313-319, 373-378, 437-445.
-
- Harris P.** *Role of arterial pressure in the oedema of heart disease.*
Lancet. 1988;1:1036-1038.
-
- Harris P.** *Congestive cardiac failure: central role of the arterial blood pressure.*
Br Heart J. 1987;58:190-203.
-
- Hasking GJ, Esler MD, Jennings GL, Burton D, Korner PI.** *Norepinephrine spillover to plasma in patients with congestive heart failure: evidence of increased overall cardiorenal sympathetic nervous activity.*
Circulation. 1986;73:615-621.
-
- Hassid A, Konieczkowski M, Dunn MJ.** *Prostaglandin synthesis in isolated rat kidney glomeruli.*
Proc Natl Acad Sci USA. 1979;76:1155-1159.
-
- Hirsch AT, Dzau VJ, Creager MA.** *Baroreceptor function in congestive heart failure: effect on neurohumoral activation and regional vascular resistance.*
Circulation. 1987;35(suppl 4):36-48
-
- Husain A.** *The chymase-angiotensin system in humans.*
J Hypertens. 1993;11:1155-1159.
-



-
- Imamura Y, Ando H, Ashihara T, Fukuyama T.** *Myocardial adrenergic nervous activity is intensified in patients with heart failure without left ventricular volume or pressure overload.*
J Am Coll Cardiol. 1996;28:371-375.
-
- Laragh JH.** *Hormones and the pathogenesis of congestive heart failure: vasopressin, aldosterone, and angiotensin II.*
Circulation. 1962;25:1015.
-
- Lee WH, Packer M.** *Prognostic importance of serum sodium concentration and its modification by converting-enzyme inhibition in patients with severe chronic heart failure.*
Circulation. 1986;73:257-267.
-
- Leimbach WN, Walin BG, Victor RG, Aylward PE, Sundlof G, Mark AL.** *Direct evidence from intraneural recordings for increased central sympathetic outflow in patients with heart failure.*
Circulation. 1986;73:913-919.
-
- Levine TB, Olivari MT, Cohn JN.** *Dissociation of the responses of the renin-angiotensin system and sympathetic nervous system to a vasodilator stimulus in congestive heart failure.*
Int J Cardiol. 1986;12:165-173.
-
- Margulies KB, Perrella MA, McKinley LJ, Burnett JC Jr.** *Angiotensin inhibition potentiates the renal responses to neutral endopeptidase inhibition in dogs with congestive heart failure.*
J Clin Invest. 1991;88:1636-1642.
-
- Neuberg GW, Kukin ML, Penn J, Medina N, Yushak M, Packer M.** *Hemodynamic effects of renin inhibition by enalkiren in chronic congestive heart failure.*
Am J Cardiol. 1991;67:63-66.
-
- O'Brien PJ, Ianzuzo CD, Moe GW, Stopps TP, Armstrong PW.** *Rapid ventricular pacing of dogs to heart failure: biochemical and physiological studies.*
Can J Physiol Pharmacol. 1990;68:34-39.
-
- Packer M.** *Neurohormonal interactions and adaptations in congestive heart failure.*
Circulation. 1988;77:721-730.
-
- Packer M.** *Is activation of the sympathetic nervous system beneficial or detrimental to the patient with chronic heart failure? Lessons learned from clinical trials with beta-adrenergic agonists and antagonists.*
J Cardiovasc Pharmacol. 1989;14(suppl 5):S38-S43.
-
- Packer M.** *Hormone-electrolyte interactions in congestive heart failure: lessons from a 4,000-year-old Sumerian tablet.*
Am J Cardiol. 1990;65:1E-3E; discussion 22E-23E.
-
- Packer M.** *Why do the kidneys release renin in patients with congestive heart failure? A nephrocentric view of converting-enzyme inhibition.*
Eur Heart J. 1990;11(suppl D):44-52.
-
- Packer M.** *The neurohormonal hypothesis: a theory to explain the mechanism of disease progression in heart failure.*
J Am Coll Cardiol. 1992;20:248-254.
-

Bibliography of One Hundred Key Papers

- Packer M.** *How should physicians view heart failure? The philosophical and physiological evolution of three conceptual models of the disease.*
Am J Cardiol. 1993;71:3C-11C.
-
- Packer M, Gottlieb SS, Kessler PD.** *Hormone-electrolyte interactions in the pathogenesis of lethal cardiac arrhythmias in patients with congestive heart failure. Basis of a new physiologic approach to control of arrhythmia.*
Am J Med. 1986;80(suppl 4A):23-29.
-
- Packer M, Lee WH, Kessler PD, Gottlieb SS, Bernstein JL, Kukin ML.** *Role of neurohormonal mechanisms in determining survival in patients with severe chronic heart failure.*
Circulation 1987;75(suppl 4):IV80-IV92.
-
- Packer M, Medina N, Yushak M.** *Role of the renin-angiotensin system in the development of hemodynamic and clinical tolerance to long-term prazosin therapy in patients with severe chronic heart failure.*
J Am Coll Cardiol. 1986;7:671-680.
-
- Packer M, Medina N, Yushak M, Lee WH.** *Usefulness of plasma renin activity in predicting haemodynamic and clinical responses and survival during long-term converting enzyme inhibition in severe chronic heart failure. Experience in 100 consecutive patients.*
Br Heart J. 1985;54 :298-304.
-
- Perrella MA, Margulies KB, Burnett JC Jr.** *Pathophysiology of congestive heart failure: role of atrial natriuretic factor and therapeutic implications.*
Can J Physiol Pharmacol. 1991;69:1576-1581.
-
- Perrella MA, Schwab TR, O'Murchu B, et al.** *Cardiac atrial natriuretic factor during evolution of congestive heart failure.*
Am J Physiol. 1992;262(4 pt 2):H1248-H1255.
-
- Pfeffer MA, Braunwald E, Moye LA, et al.** *Effect of captopril on mortality and morbidity in patients with left ventricular dysfunction after myocardial infarction. Results of the survival and ventricular enlargement trial. The SAVE Investigators.*
N Engl J Med. 1992;327:669-677.
-
- Raine AEG, Erne P, Bürgisser E, et al.** *Atrial natriuretic peptide and atrial pressure in patients with congestive heart failure.*
N Engl J Med. 1986;315:533-537.
-
- Rector TS, Olivari MT, Levine TB, Francis GS, Cohn JN.** *Predicting survival for an individual with congestive heart failure using the plasma norepinephrine concentration.*
Am Heart J. 1987;114:148-152.
-
- Redfield MM, Aarhus LL, Wright RS, Burnett JC Jr.** *Cardiorenal and neurohumoral function in a canine model of early left ventricular dysfunction.*
Circulation. 1993;87:2016-2022.
-
- Redfield MM, Edwards BS, McGoon MD, et al.** *Failure of atrial natriuretic factor to increase with volume expansion in acute and chronic heart failure.*
Circulation. 1989;80:651-657.
-
- Riegger AJ, Lieblau G, Holzschuh M, Witkowski D, Steilner H, Kochsiek K.** *Role of the renin-angiotensin system in the development of congestive heart failure in the dog as assessed by chronic converting-enzyme blockade.*
Am J Cardiol. 1984;53:614-618.
-



-
- Riegger GAJ, Elsner D, Kromer EP, et al.** *Atrial natriuretic peptide in congestive heart failure in the dog: plasma levels, cyclic guanosine monophosphate, ultrastructure of atrial myoendocrine cells, and hemodynamic, hormonal, and renal effects.*
Circulation. 1988;77:398-406.
-
- Riegger GAJ, Liebau G, Kochsiek K.** *Antidiuretic hormone in congestive heart failure.*
Am J Med. 1982;72:49-52.
-
- Rodeheffer RJ, Naruse M, Atkinson JB, et al.** *Molecular forms of atrial natriuretic factor in normal and failing human myocardium.*
Circulation. 1993;88:364-371.
-
- Rouleau JL, de Champlain J, Klein M, et al.** *Activation of neurohumoral systems in postinfarction left ventricular dysfunction.*
J Am Coll Cardiol. 1993;22:390-398.
-
- Rouleau JL, Moye LA, de Champlain J, et al.** *Activation of neurohumoral systems following acute myocardial infarction.*
Am J Cardiol. 1991;68:80D-86D.
-
- Rouleau JL, Packer M, Moye L, et al.** *Prognostic value of neurohumoral activation in patients with an acute myocardial infarction: effect of captopril.*
J Am Coll Cardiol. 1994;24:583-591.
-
- Rundqvist B, Elam M, Bergmann-Sverrisdottir Y, Eisenhofer C, Friberg P.** *Increased cardiac adrenergic drive precedes generalized sympathetic activation in human heart failure.*
Circulation. 1997;95:169-175.
-
- Schrier RW, Berl T, Anderson RJ.** *Osmotic and non-osmotic control of vasopressin release.*
Am J Physiol. 1979;236:F321-F332.
-
- Scriven TA, Burnett JC.** *Effects of synthetic atrial natriuretic peptide on renal function and renin release in acute experimental heart failure.*
Circulation. 1985;72:892-897.
-
- Shenker Y.** *Atrial natriuretic hormone effect on renal function and aldosterone secretion in sodium depletion.*
Am J Physiol. 1988;255:R867-R873.
-
- Sigurdsson A, Held P, Swedberg K, Wall B.** *Neurohormonal effects of early treatment with enalapril after acute myocardial infarction and the impact on left ventricular remodelling.*
Eur Heart J. 1993;14:1110-1117.
-
- Sigurdsson A, Held P, Swedberg K.** *Short- and long-term neurohormonal activation following acute myocardial infarction.*
Am Heart J. 1993;126:1068-1076.
-
- Sigurdsson A, Swedberg K.** *Left ventricular remodelling, neurohormonal activation and early treatment with enalapril (CONSENSUS II) following myocardial infarction.*
Eur Heart J. 1994;15(suppl B):14-19; discussion 26-30.
-
- Sigurdsson A, Swedberg K, Ullman B.** *Effects of ramipril on the neurohormonal response to exercise in patients with mild or moderate congestive heart failure.*
Eur Heart J. 1994;15:247-254.
-

Bibliography of One Hundred Key Papers

- Simpson P.** *Norepinephrine-stimulated hypertrophy of cultured rat myocardial cells is an α_1 -adrenergic response.*
J Clin Invest. 1983;72:732-738.
-
- Sklar AH, Schrier RW.** *Central nervous system mediators of vasopressin release.*
Physiol Rev. 1983;63:1243-1280.
-
- SOLVD Investigators.** *Effect of enalapril on survival in patients with reduced left ventricular ejection fraction and congestive heart failure.*
N Engl J Med. 1991;325:293-302.
-
- SOLVD Investigators.** *Effect of enalapril on mortality and the development of heart failure in asymptomatic patients with reduced left ventricular ejection fraction.*
N Engl J Med. 1992;327:685-691.
-
- Swedberg K, Eneroth P, Kjekshus J, Snapinn S.** *Effects of enalapril and neuroendocrine activation on prognosis in severe congestive heart failure (follow-up of the CONSENSUS trial)*
CONSENSUS Trial Study Group.
Am J Cardiol. 1990;66:40D-44D.
-
- Swedberg K, Eneroth P, Kjekshus J, Wilhelmsen L.** *Hormones regulating cardiovascular function in patients with severe congestive heart failure and their relation to mortality.*
CONSENSUS Trial Study Group.
Circulation. 1990;82:1730-1736.
-
- Swedberg K, Held P, Kjekshus J, Rasmussen K, Ryden L, Wedel H.** *Effects of the early administration of enalapril on mortality in patients with acute myocardial infarction. Results of the Cooperative New Scandinavian Enalapril Survival Study II (CONSENSUS II) [see comments].*
N Engl J Med. 1992;327:678-684.
-
- Swedberg K, Kjekshus J.** *Effect of enalapril on mortality in congestive heart failure. Follow-up survival data from the CONSENSUS trial.*
Drugs. 1990;39(suppl 4):49-52; discussion 53-44.
-
- Tan LB, Jalil JE, Pick R, Janicki JS, Weber KT.** *Cardiac myocyte necrosis induced by angiotensin II.*
Circ Res. 1991;69:1185-1195.
-
- Thomas JA, Marks JM.** *Plasma norepinephrine in congestive heart failure.*
Am J Cardiol. 1978;41:233-243.
-
- Volpe M, Tritto C, De Luca N, et al.** *Failure of atrial natriuretic factor to increase with saline load in patients with dilated cardiomyopathy and mild heart failure.*
J Clin Invest. 1991;88:1481-1489.
-
- Wade OL, Bishop JM.** **Cardiac Output and Regional Blood Flow.**
Oxford, UK: Blackwell Scientific Publications; 1962.
-
- Watkins L Jr, Burton JA, Haber E, Cant JR, Smith F, Barger A.** *The renin-angiotensin-aldosterone system in congestive heart failure in conscious dogs.*
J Clin Invest. 1976;57:1606-1617.
-
- Wei CM, Heublein DM, Perrella MA, et al.** *Natriuretic peptide system in human heart failure.*
Circulation. 1993;88:1004-1009.
-