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## Intradialytic Hypertension: A Case Study of an Often Unrecognized and Overlooked Reaction to the Initiation of Hemodialysis

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Mr. M is a 32 year old Caucasian male with a history of type I diabetes mellitus(DM) and hypertension(HTN) who received a kidney/pancreas transplant in April of 2008. Mr. M did well until November of 2009 when he developed an acute rejection of his kidney transplant and in August of 2010 his reduction in kidney function required initiation of renal replacement therapy. His elevated blood pressure was previously treated with multiple medications. With medications Mr. M was normotensive, his blood pressures ranged 120's systolic over 60's diastolic. During his dialysis sessions his blood pressure rose rapidly during the first 5 minutes of his treatment. Blood pressures ranged 210's systolic over 110's dialstolic and Mr. M reported severe frontal headaches. Initially, Mr. M was treated with an increase in his lisinopril dose and changing his epogen to subcutaneous(SQ) versus intravenous(IV). These initial interventions proved of little use. Consequently, Mr. M was given clonidine 0.1mg and aliskiren 300mg just prior to starting his treatments which resulted in a reduction in his blood pressure during the first 10 minutes of his treatment with a return to his baseline blood pressure within an hour of treatment initiation. Discussion: Intradialytic hypertension (ID) is defined as the elevation of blood pressure, both systolic and diastolic, immediately after initiation of a hemodialysis session. Although rare, 15% of dialysis patients experience this with an increase in adverse outcomes. It is uncertain what causes this response but it is multifactorial and includes subclinical volume overload, sympathetic overactivity, activation of the renin-angiotensin system, endothelial cell dysfunction and specific dialytic techniques. Treatment of ID is individualized but should include aggressive fluid/dry weight management, inhibition of the rennin-angiotensin-aldosterone system(RAAS), change from dialyzable blood pressure medications, changing from IV to SQ erythropoietin stimulating agents(ESA) and altering the dialysis prescription.

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