Influence of Bushenhuoxue on podocytes of focal segmental glomerulosclerosis mice

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Focal segmental glomerulosclerosis (FSGS) is a common, difficult to treat glomerular disease that can eventually lead to end-stage renal disease (ESRD). Its pathogenesis is not entirely clear and treatment methods remain controversial. Many studies have shown that podocyte injury at different stages is a key event of FSGS pathology. Consequently, protecting injured podocytes has become a key aspect of current FSGS treatments. The podocyte is an intrinsic, highly specialized kidney cell with limited regenerative ability. It is difficult for the podocyte to repair itself and proliferate when it is damaged or reduced. Podocyte mutations and changes in their numbers and distribution can cause structural changes and induce albuminuria and glomerular sclerosis. Treatment of FSGS using western medicine does not result in a cure, it is expensive and there are serious side effects. Traditional Chinese medicine could offer an effective way to treat FSGS. Daning used Bushenhuoxue to treat and cure renal diseases; Bushenhuoxue comprises greater than 10 kinds of Chinese herbal medicines that promote blood circulation and Qi, remove blood stasis and tonify the kidney. We focused on desmin, nephrin and wt1 expression in podocytes of FSGS mice and their regulation by Bushenhuoxue. We also sought to elucidate the protective mechanisms of Bushenhuoxue on injured podocytes.

Biography
Mianzhi Zhang has completed his MD from Hebei Medical University. He has published more than 90 papers in reputed journals. He has participated in editing publications such as The Basic Theory of Zhang Daning’s Traditional Chinese Medicine, The Research on Zhang Daning’s Academic Thoughts, The Study on Zhang Daning’s Methods of the Kidney Invigorating and Blood Activating, The Progress Academic Thought on Zhang Daning and ‘The Basis and Clinical Treatment of Diabetic Nephropathy’.

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