Question 5 – September 3

Which of the following correctly describes the pathophysiology of hepatorenal syndrome?

A. Splanchnic and systemic arterial vasodilation and paradoxical renal vasoconstriction leading to decreased renal perfusion
B. Splanchnic and systemic arterial vasoconstriction and paradoxical renal vasodilation leading to decreased renal perfusion
C. Splanchnic arterial vasodilation, systemic arterial vasoconstriction, and renal vasodilation leading to decreased renal perfusion
D. Splanchnic and systemic arterial vasoconstriction and concomitant renal vasoconstriction leading to decreased renal perfusion
E. Splanchnic arterial vasoconstriction, systemic arterial vasodilation, and renal vasoconstriction leading to decreased renal perfusion

Answer: A
The pathophysiology of hepatorenal syndrome is splanchnic and systemic arterial vasodilation. this results in a reduction in effective arterial blood volume and subsequent renal vasoconstriction. This results in a decrease in renal blood flow and GFR as well as renal sodium retention. It is generally treated with albumin expansion and vasoconstrictors if needed.