BPC 157 given during reperfusion counteracts portal hypertension, caval hypertension, and aortal hypotension in rats with prior portal triad obstruction

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Reperfusion provokes major disturbances after the Pringle maneuver. We demonstrated the usefulness of the stable gastric pentadecapeptide BPC 157 as therapy for the hemodynamic disturbances after the Pringle maneuver, a temporary portal triad obstruction (PTO) (hepatic artery, portal vein, common bile duct occlusion for 30 min), with BPC 157 given during reperfusion, in the post-PTO period. In deeply anesthetized and laparatomized rats that had a PTO, the recording lasted 5 minutes with a cannula connected to a pressure transducer, inserted into the portal vein, inferior caval vein and abdominal aorta at the level of its bifurcation at 24 h of reperfusion time. BPC 157 or saline was applied as an abdominal bath in rats that had a PTO, in the post-PTO-period, at 1 min or at 24 h reperfusion time. When BPC 157 was given in circumstances of portal and caval hypertension, and arterial hypotension, disturbances were completely eliminated. This presents a potential therapeutic advantage. Thereby, whithout therapy, the pressure of both the portal and the caval system remains elevated after removal of the portal clamp. Thus, the effectiveness of the therapy, when given at distinctive points during reperfusion, appears as conclusive evidence of its efficacy. BPC 157 therapy mitigates the whole syndrome, involving the course of an even more complex model that should include rats clamped by the hepatic artery, portal vein, and bile duct vs. rats that used to have a clamped portal triad and later underwent reperfusion.