Kerusakan tubulus ginjal pada oklusi A. Renalis yang terus menerus, berkala dan Oklusi A. Renalis terus menerus yang disertai pendinginan dengan es pada tikus wistar

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Abstrak

Objective : To examine the effects of continous renal artery occlusion, intermittent occlusion and continuous occlusion with local hypothermia using ice slush on renal proximal tubule damage of wistar rats.

Methods : Twenty eight Wistar rats were used. In controls group only laparotomy was performed. In group I, the left renal artery was continuously occluded for 30 minutes then the kidney was surgically removed. In group II, the left renal artery was intermittently occluded for 5 minutes, a release of the occlusion for another 5 minutes for 3 cycles then the kidney was surgically removed. In group IFI the left renal artery was occluded continuously for 30 minutes with local hypothermia using ice slush then the kidney was surgically removed. The degree of the renal proximal tubule damage was examined using x 400 magnification of light microscope.

Result : The degree of renal proximal tubular damage was significantly lower in group III compared to group I and II (p = 0,005 and p = 0,005).There was no significant difference of the degree of renal proximal tubule damage between group I and II (p = 0,593).

Conclusion : In this study, local hypothermia using ice slush on ischemic kidney was found to be effective in reducing renal tubular damage.