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Plasma humanin level in AKI and CKD patients

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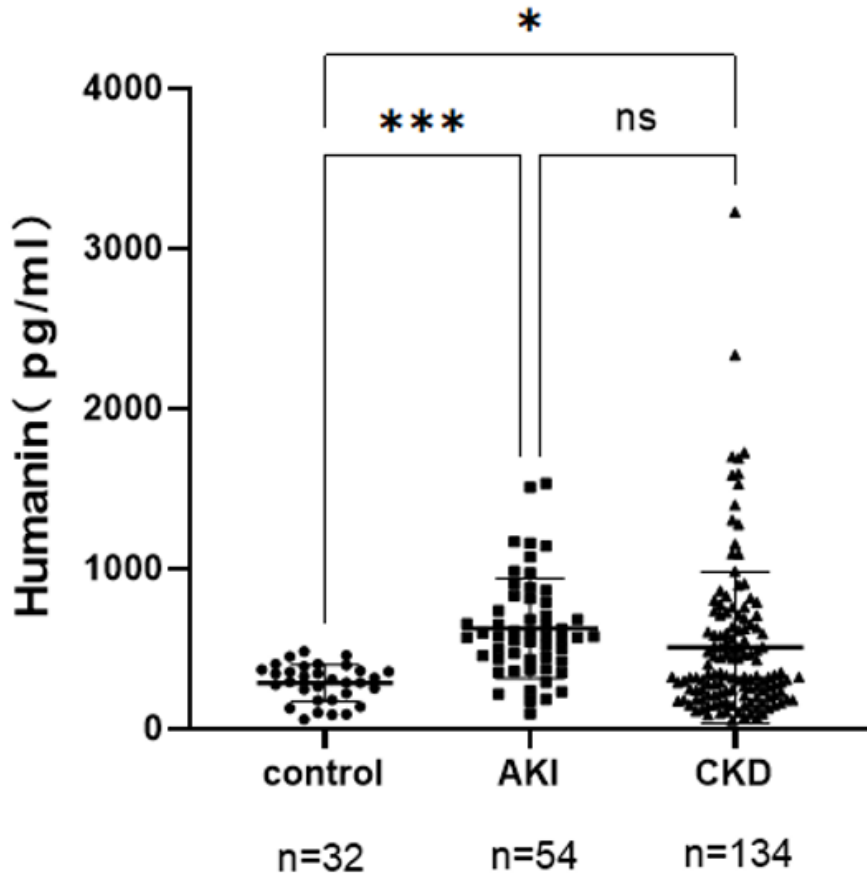
Objectives : Aimed to determine the diagnostic value of humanin for kidney injury

Methods : Plasma from patients with kidney disease and healthy controls (4ml EDTA tube, centrifugation at 3000r/min for 10min and supernatant was taken for -80°storage), divided into AKI group, CKD group and control group, and plasma humanin level was measured by ELISA.

Results : A total of 188 patients (54 AKI, 134 CKD) and 32 healthy people were studied. The plasma humanin level in the AKI group and the CKD group was significantly higher than that in the healthy control group [576.5 (430.0-796.2) pg/mL vs 298.6 (188.8-366.4) pg/mL, $p=0.0006$ and 325.9 (207.3-631.4) pg/mL vs 298.6 (188.8-366.4) pg/mL, $p=0.0164$, respectively]. On the basis of receiver-operating characteristic analysis humanin could predict AKI and CKD [area under the curve (95% confidence interval) 0.869 (0.794-0.944) and 0.620 (0.529-0.711), respectively]. A cut-off point >413.2 pg/mL for humanin had a sensitivity of 0.78 and specificity of 0.91 in predicting AKI and a cut-off point >481.4 pg/mL for humanin had a sensitivity of 0.38 and specificity of 0.89 in predicting CKD.

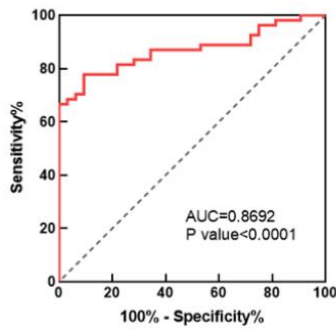
Conclusions : Humanin, a mitochondrial-derived peptide with increased levels in both AKI and CKD, may be a novel biomarker suggesting renal impairment.

三组比较.png



三组比较.png

A



B

