

Kidney artery pseudoaneurysm after blunt renal trauma: A case report

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Kidney artery pseudoaneurysm usually results from iatrogenic procedures such as a kidney biopsy. However, it can rarely occur by trauma and can be a fatal situation of massive bleeding. We report here a case of kidney artery pseudoaneurysm after blunt trauma and successful treatment. A 28-year-old male presented to our clinic with exacerbation of pain after an accident in which the box collided with his left flank during work two days ago. He had a history of strabismus surgery and soft palate rupture surgery 20 years ago. Initial vital signs were stable, and laboratory data were unremarkable excluding anemia (hemoglobin 9.9 g/dl, Creatinine 0.48mg/dl) and microscopic hematuria (urine RBCs 20/HPF). On the initial CT scan, it showed a subcapsular and perirenal hematoma of the left kidney. Since there was no gross hematuria, the damage to the collecting system was thought to be not prominent. After three days, a CT scan for follow-up showed pseudoaneurysm (Figure 1), and angiography was performed. It revealed a huge pseudoaneurysm in pelvis and multiple intra-parenchymal pseudoaneurysm. There were no specific findings on the laboratory investigation performed to exclude the possibility of vasculitis as the injury mechanism and intensity were not clear. Embolization with plugs and gel foam was performed to prevent its rupture. After one month and four months later, CT scan was performed for follow-up, and it was confirmed that the hematoma and pseudoaneurysm became smaller. Although there was a decrease in left kidney perfusion, he was discharged with no decrease in glomerular filtration rate. Kidney artery pseudoaneurysm by blunt trauma is a rare case. In this case, we report that it improved and kidney function was preserved through embolization without nephrectomy.

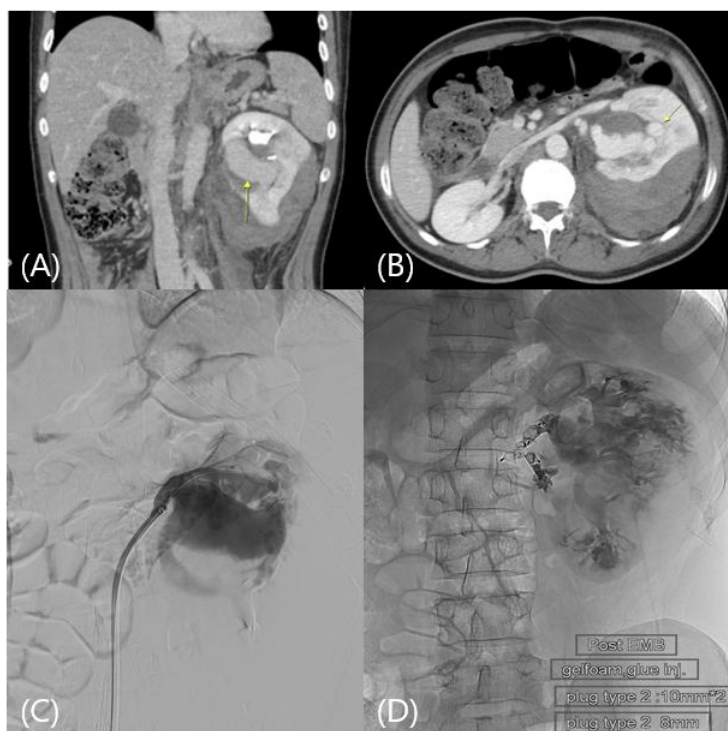


Figure 1. Computed tomography(CT) : grade IV left kidney injury with large perirenal and subcapsular hematoma (A) Coronal view and (B) horizontal view. Angiographic Confirmation of kidney artery pseudoaneurysm (C) and result after embolization (D).