



RENAL CORTICAL NECROSIS in pregnancy : a rare but roaring entity in postpartum haemorrhage

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BACKGROUND:

Renal cortical necrosis (RCN) is a rare but catastrophic complication of acute kidney injury (AKI); obstetric AKI is usually associated with poor outcomes. There are a number of causes that lead to RCN in pregnancy. RCN is more common in developing countries, but the incidence is decreasing with better aseptic practices.

We present 2 cases of bilateral renal cortical necrosis diagnosed in a postpartum hemorrhage settings.

CASE n1:

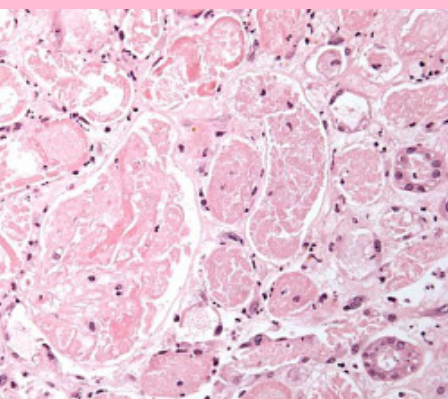
A 27-year-old multigravida, with gynecological history of (G4 D4 with 2 deceased newborns at day 3 of postpartum), with a family history of a deceased mother due to pre-eclampsia. The patient presented to the emergency room with pre-eclampsia at 34 weeks of amenorrhea with blackish metrorrhagia and right upper quadrant abdominal pain, the patient benefited from a rescue delivery by C section, the evolution was marked by hemorrhage of delivery of great abundance, on day 5 of post-op the patient installed acute kidney injury (AKI) and anuria with a serum creatinine level at 97mg/l requiring renal replacement therapy, an abdominal and pelvic injected CT scan was carried out revealing a delay enhancement of the 2 kidneys more marked bilaterally and symmetrically in the cortex. the evolution was marked by partial renal recovery of at day 25, and total renal recovery at day 40 with a creatinine level at 12 mg/l. The patient is still followed up in our consultation.



Figure 1: injected CT scan revealing a delay enhancement of the 2 kidneys more marked bilaterally and symmetrically in the cortex.

CASE n2:

A 34-year-old primigravida, with no medical history. The patient was admitted to the obstetrical emergency room in labor at 38 week of amenorrhea, the patient delivered then a healthy newborn boy, the evolution was marked by hemorrhage of delivery of mild to great abundance, on day 2 of postpartum the patient developed anuria and pulmonary edema, biology showed a serum creatinine level at 43 mg/l, the patient was transferred to the nephrology department, an abdominal and pelvic injected CT scan was performed revealing a delay enhancement of the 2 kidneys more marked in the right renal cortex. The patient received 3 dialysis sessions. The evolution was marked by a total renal recovery at day 40 with a creatinine level at 8 mg/l. The patient is still followed up in our consultation.



DISCUSSION & CONCLUSION:

However, renal cortical necrosis is now generally considered quite rare in resource-rich countries and is responsible for only 1–2% of all AKI cases.

REFERENCES:

- 1 Krane NK. Acute renal failure in pregnancy. Arch Intern Med 1988; 148:2347.
- 2- Grünfeld JP, Pertuiset N. Acute renal failure in pregnancy: 1987. Am J Kidney Dis 1987; 9:359.
- 3- Fakhouri E, Vercel C, Frémeaux-Bacchi V. Obstetric nephrology: AKI and thrombotic microangiopathies in pregnancy. Clin J Am Soc Nephrol 2012; 7:2100.