

Perioperative Anesthetic Complication for Kidney Transplantation, 25 Years Experience in Ramathibodi Hospital.

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Objective: To study patients, surgical, anesthetic profiles and adverse events of kidney transplantation.

Materials and Methods: A retrospective of data describing practices and adverse events during kidney transplantation were collected, during 1 January to 31 December 2010, from electronic medical record and descriptive statistics analysis was used.

Results: A total of 82 cases, including 51(62%) living donor and 31(38%) cadaveric donor kidney transplantations were reviewed. The mean(S.D.) of age and weight of the patients were 42.6(13.9) yrs and 57.8(12.2) kgs respectively. Hypertension (92.7%), anemia (72%), diabetes mellitus (19.5%) were the three most common abnormalities associated with ESRD. The preoperative investigation (mean \pm S.D.) were hemoglobin (11.4 \pm 2.0 gm%), BUN (40.4 \pm 24.8 mg/dL), creatinine (8.44 \pm 3.7 mg/dL) and potassium (4.3 \pm 0.6 mmol/L). Thirty four patients received no premedication (42.5%). Antihypertensive and anxiolytic drugs were administered (55.7%, 23.2%). Basic monitoring was used. Special monitoring were invasive blood pressure monitoring (5.1%) and central venous pressure monitoring (5.1%). All of the operations were done under general anesthesia. The record included anesthesia time (258.53 \pm 52.06 min), cold ischemic time (CIT,LD=31.66 \pm 21.61 min), cold ischemic time (CIT,CD=1238.74 \pm 272.99 min), relative warm ischemic time (rWIT=48 \pm 18.17 min). Average estimated blood loss was 384.35 \pm 591.32 ml (range 20-5000). The adverse events (n,%) in the perioperative period were hypertension (63,76.8%), hypotension (<15 min) (52,63.4%), bradycardia (1,1.2%), premature ventricular contraction (1,1.2%) and unplanned ICU admission (1,1.2%). One patient expired from serious medical complication.

Conclusion: This retrospective study indicates that there is a relatively higher rate of adverse events in CDKT recipients compared with LDKT recipients, but no major anesthetic-related adverse events in perioperative period in Ramathibodi Hospital.

Keywords: Kidney transplantation; End stage renal disease; General anesthesia

Abbreviation: LDKT= Living donor kidney transplantation, CDKT= Cadeveric donor kidney transplantation, ESRD= End stage renal disease