

Hyponatremia and Surgery

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Postoperative hyponatremia is commonly symptomatic of seizure, respiratory arrest and death. They are more common in women, in particular menstruating women, than men. While 1% of postoperative patients become symptomatic (hyponatremic encephalopathy), all postoperative patients are at risk for development of hyponatremia.

Transsphenoidal surgery for pituitary adenoma is the most common type of surgery associated with hyponatremia. However hyponatremia is not as serious hyponatremia which developed after abdominal surgery. The most important and easily preventable risk factor in postoperative hyponatremia is administration of hypotonic fluid (0.45% saline or 5% dextrose in water infusion). Prevention is the mainstay of therapy in postoperative hyponatremia by avoiding infusion of hypotonic fluid.

In conclusion, postoperative hyponatremia is a potentially serious disorder. For elective surgery hyponatremia should be corrected to near normonatremia (> 135 mmol/L) to reduce morbidity and mortality. Isotonic saline (0.9% saline) infusion is the mainstay of fluid therapy in the immediate postoperative period.

Biography

Mandal completed his MBBS at the age of 24 from Calcutta University in India. He received his nephrology training at the University of Illinois, Chicago and has done extensive research on hypertension, diabetes, and kidney disease. He has published more than 200 papers and abstracts as well as 12 books. He has been a visiting professor in 24 countries including numerous times in India, and is a courtesy clinical professor of the University of Florida, Gainesville. He is dedicated to changing the direction of diabetes care in order to help diabetics live a complication-free life.

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