

Surgical Guidelines for Addison's Disease and other forms of Adrenal Insufficiency

Potentially Life Threatening Steroid Dependency, Steroids and Saline Requirements for Surgery and Dentistry

Type of procedure	Pre-operative and operative needs (See Note 1)	Post-operative needs (See Note 3)
Lengthy, major surgery with long recovery time <i>eg. open heart surgery, major bowel surgery, procedures needing ICU</i>	100 mg hydrocortisone (Solu-Cortef) IV or IM just before anaesthesia. (See Note 3)	Continue 100 mg hydrocortisone (Solu-Cortef) IV or IM every 6 hours until able to eat & drink normally (<i>discharged from ICU</i>). Then double oral dose for 48+ hours. Then taper the return to normal dose
Major surgery with rapid recovery <i>eg. caesarean section, joint replacement</i>	100 mg hydrocortisone (Solu-Cortef) IV or IM just before anaesthesia. (See Note 3)	Continue 100 mg hydrocortisone (Solu-Cortef) IV or IM every 6 hours for 24 - 48 hours (<i>or until eating & drinking normally</i>). Then double oral dose for 24 - 48 hours. Then return to normal dose
Labour and vaginal birth	100 mg hydrocortisone (Solu-Cortef) IV or IM at onset of labour then 6 hourly until delivery.	Double oral dose for 24 - 48 hours after delivery. If well, then return to normal dose
Minor surgery <i>eg. cataract surgery, hernia repairs, laparoscopy with local anaesthetic</i>	100 mg hydrocortisone (Solu-Cortef) IV or IM just before anaesthesia. (See Note 3)	Double dose oral medication for 24 hours. Then return to normal dose
Invasive bowel procedures requiring laxatives <i>eg. colonoscopy, barium enema</i>	Hospital admission overnight with IV fluids and 100 mg hydrocortisone (Solu-Cortef) IV or IM during purgative stages of preparation. 100 mg hydrocortisone IM just before commencing.	Double dose oral medication for 24 hours. Then return to normal dose
Other invasive procedures <i>eg. endoscopy, gastroscopy</i>	100 mg hydrocortisone (Solu-Cortef) IV or IM just before commencing.	Double dose oral medication for 24 hours. Then return to normal dose.
Minor procedure <i>eg. skin mole removal with local anaesthetic</i>	Not usually required.	An extra dose only where hypoadrenal symptoms occur afterwards
Major dental surgery <i>eg. dental extraction with general anaesthetic</i>	100 mg hydrocortisone (Solu-Cortef) IV or IM just before anaesthesia. (See Note 3)	Double dose oral medication for 24 hours. Then return to normal dose
Dental surgery <i>eg. root canal work with local anaesthetic</i>	Double dose (<i>up to 20 mg hydrocortisone</i>) one hour prior to surgery.	Double dose oral medication for 24 hours. Then return to normal dose
Minor dental procedure <i>eg. replace filling</i>	Not usually required.	An extra dose where hypoadrenal symptoms occur afterwards.

NOTES:

- For any nil-by-mouth regimen, please arrange an intravenous saline infusion to prevent dehydration and maintain mineralocorticoid stability, eg. 1000 mL every 8 hours if >50 kg.
- Please administer bolus hydrocortisone over a minimum of 10 minutes to prevent vascular damage.
- Monitor electrolytes and blood pressure post-operatively for all procedures requiring steroid cover. If the patient becomes hypotensive, drowsy, or peripherally shut down, administer 100 mg hydrocortisone IV or IM immediately.
- If any post-operative complications arise, eg. fever, delay the return to normal dose.
- Please ensure back-up supplies of oral and injectable hydrocortisone are available for resuscitation before commencing surgery. Even at full steroid cover, post-operative resuscitation may occasionally be required.

This chart is based on the UK ADSHG (Addison's Disease Self Help Group) published information.
It is reproduced here for the education of patients and information for Medical Doctors in Canada.
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