ABDOMINAL HYSTERECTOMY

SUMMARY RECOMMENDATIONS

Notes on PROSPECT recommendations

The 2006 recommendations of the PROSPECT Working Group are graded A–D, based on the level of evidence from the studies, which is in accordance with the Oxford Centre for Evidence-Based Medicine (CEBM website accessed Dec 2003, Sackett 2000). In the context of PROSPECT, recommendations based on procedure-specific evidence are grade A (randomised clinical trials), those based on transferable evidence are grade B (randomised clinical trials) or grade C (retrospective studies or case series) and those based on clinical practice are grade D. (Click here for further information on levels of evidence and grades of recommendation)

PROSPECT provides clinicians with supporting arguments for and against the use of various interventions in postoperative pain based on published evidence and expert opinion. Clinicians must make judgements based upon the clinical circumstances and local regulations. At all times, local prescribing information for the drugs referred to must be consulted. The following pre-, intra- and postoperative interventions have been evaluated for the management of postoperative pain following abdominal hysterectomy:

Pre-operative

Recommended:

- **Single-dose spinal local anaesthetic plus strong opioid, for anaesthetic (grade D) and postoperative analgesic purposes (grade A), but the benefits must be weighed against the risks of the invasive nature of the procedure**
- **Cognitive intervention (grade A)**

Not recommended:

- Systemic analgesics (e.g. IV COX-2 inhibitors, conventional NSAIDs, strong opioids), except to secure sufficient analgesia when the patient wakes up (e.g. oral COX-2 inhibitors) (grade A)
- Clonidine, NMDA-receptor antagonists and benzodiazepines (grade A)
- Epidural single dose for postoperative analgesia (grade A)
- Local anaesthetic skin infiltration at the proposed site of incision (grade A) (but intra-operative wound infiltration is recommended, see below)
- Homeopathic arnica and self-relaxation techniques (grade A)

Intra-operative

Recommended:

- **General anaesthesia, or single dose spinal anaesthesia with or without light general anaesthesia in low-risk patients (grade D)**
- **Epidural anaesthesia combined with light general anaesthesia or combined spinal-epidural anaesthesia, in high-risk patients (grade A)**
- **Strong opioids administered in enough time to secure sufficient analgesia when the patient wakes (grade A)**
- **Wound infiltration before closure (grade A)**
- **LAVH or VH rather than abdominal hysterectomy, only if allowed by the surgical requirements (based on technical feasibility, patient indication for hysterectomy and risk factors) (grade A)**
- **Pfannenstiel incision, only if allowed by the surgical requirements (based on technical feasibility, patient indication for hysterectomy and risk factors) (grade B)**
- **Diathermy incision (grade B)**
- **Active patient warming in high-risk patients (grade A)**
- **Intra-operative music (grade A)**

Not recommended:

- Epidural single dose for postoperative analgesia (grade A)
- Adenosine, NMDA-receptor antagonists, benzodiazepines or tryptophan (all grade A)
- Intraperitoneal analgesia (grade A)
- Unsutured peritoneum, wet film dressing (both grade A) or surgical drains (grade D)
- Therapeutic suggestions or electroacupuncture (both grade A)

Postoperative

Recommended:

- **COX-2 selective inhibitors or conventional NSAIDs, in combination with strong opioids for high-intensity pain (VAS=50) or with weak opioids for moderate- (VAS<50>30) or low-intensity pain (VAS=30) (grade A)**
- **Strong opioids by IV PCA or by fixed IV dosing titrated to pain intensity (grade A)**
- **Paracetamol for moderate- (VAS>30<50) or low-intensity (VAS=30) pain, in combination with COX-2 inhibitors or conventional NSAIDs (grade A)**
- **Epidural analgesia in high-risk patients (grade A and D)**

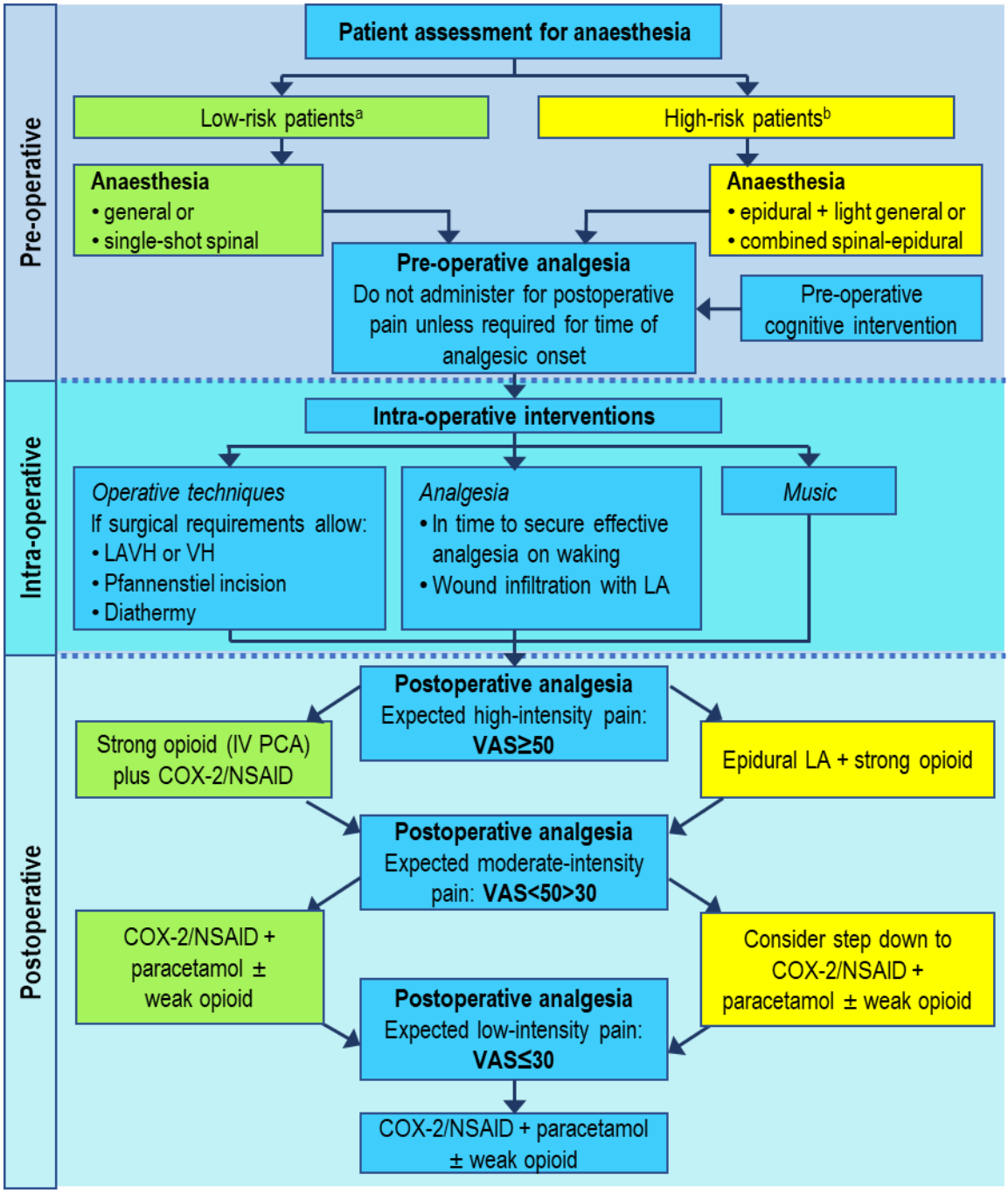
Not recommended:

- Epidural analgesia for routine use in low-risk patients (grade D)
- Repeat spinal boluses of analgesic (grade D)
- Concomitant administration of COX-2 selective inhibitors or conventional NSAIDs with epidural analgesia (grade B)
- Continuous infusion of strong opioid during PCA bolus dosing (grade D)
- IM administration of strong opioids (grade D)

- Intra-nasal, slow-release oral and transdermal patch administration of strong opioids (grade D)
- Paracetamol for high-intensity pain (VAS=50 mm) (grade B)
- NMDA-receptor antagonists and benzodiazepines (both grade A)
- Clonidine, pentazocine, clomipramine, delta-9-tetrahydrocannabinol and naloxone (all grade A)
- Continuous wound infiltration of local anaesthetics after closure (grade A) (although pre-closure wound infiltration is recommended, see above)
- Music in PACU, homeopathic arnica or self-relaxation techniques (all grade A)

See Overall PROSPECT Recommendations for the overall strategy for managing pain after abdominal hysterectomy

Overall PROSPECT Recommendations



Not recommended

- **Systemic or epidural**
  adenosine, clonidine, NMDA-receptor antagonists, benzodiazepines, homeopathic arnica, pentazocine, clomipramine, delta-9-tetrahydrocannabinol or naloxone at any time
- **Operative techniques**
  unsutured peritoneum technique, surgical drains or wet dressings
- **Modes of administration**
  strong opioids: IM, intra-nasal, oral slow-release tablets or transdermal patches; intraperitoneal local anaesthetic; or postoperative wound infiltration of local anaesthetic
- **Non-pharmacological techniques**
  music or self-relaxation techniques postoperatively

This algorithm for managing postoperative pain is based on the PROSPECT recommendations and illustrates the different treatment pathways for low- (green) and high- (yellow) risk patients, as well as describing the steps of the peri-operative pathway/therapies that apply to all patients (blue). Therapies that are not recommended are also indicated (grey).

[a] Low-risk patients are otherwise healthy patients who are not considered to be at a higher risk than is typically associated with anaesthetic or analgesic agents.

[b] High-risk patients are those considered to be at a high risk of adverse effects from inhalation anaesthetics and high-dose opioids, e.g. those at risk of organ dysfunction or undergoing extensive surgery for malignancy.