

Regional Anaesthesia in Day Case Surgery: Challenges and Unresolved Issues

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Day surgery (outpatient or ambulatory surgery) provides high quality and efficient care for a wide variety of surgical procedures with primary aim early recovery and satisfaction of the patients, while the health system benefits from the reduced costs. The use of regional anesthesia has grown in popularity in day surgery. The regional technique chosen depends on the surgical site, the anticipated length of the procedure, the analgesic needs and the desired duration of postoperative pain control. Regional anesthesia techniques include central neuraxial blockade, peripheral nerve blocks, local infiltration and intravenous regional anesthesia (Bier’s block). Benefits of regional anesthesia compared to general anesthesia constitute the decreased incidence of postoperative nausea-vomit (PONV) and of postoperative pain, the reduced need for analgesics, the increased alertness, the shortened post-anesthesia care unit (PACU) time, the reduced costs. However, the choice of regional anesthesia in day surgery is related with various problems. First of all, the regional anesthesia requires active co-operation of patient and surgeon. Moreover, when a regional technique is chosen as the most suitable for a day surgery different issues arise, such as prolonged time needed for execution and installation of the block, the extended recovery time for full block regression, the delayed patient mobilization. Induction may be associated with patient discomfort, movement during surgery can be a problem in a very anxious patient and If the block fails the anaesthetist must be on stand-by to convert to general anaesthesia immediately. Additionally, there is a risk of complications specific to each regional technique and to the local anaesthetic drug used, such as postdural puncture headache (PDPH), transient neurological symptoms, nerve damage, urinary retention, local anesthetic toxicity.