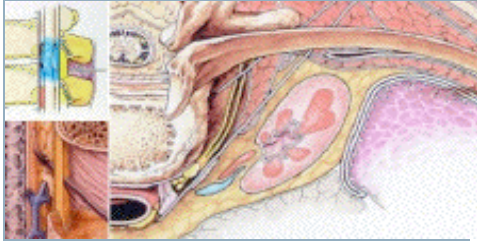


AnesthesiaDotCalm



News You Can Use

Insights Into Clinical Practice

IN THE NEWS

MAIN REASON FOR UNEXPECTED HOSPITAL ADMISSION

PAIN, NOT NAUSEA AND VOMITTING, IS NOW THE BIGGEST ANESTHESIA-RELATED CAUSE OF UNEXPECTED ADMISSION TO THE HOSPITAL AFTER AMBULATORY SURGERY.

(REF: COLEY KC, WILLIAMS BA, ET AL. RETROSPECTIVE EVALUATION OF UNANTICIPATED ADMISSIONS AND READMISSIONS AFTER SAME DAY SURGERY AND ASSOCIATED COSTS. J CLINICAL ANESTHESIA 2002;14:349-353)

USE OF SEVOFLURANE DURING C-SECTION

The incidence of intraoperative awareness and recall for parturients having cesarean delivery under general anesthesia is quite high (7% for recall of pain and 17% for occurrence of nightmares). Isoflurane 0.5% (0.5 MAC when used with 50% nitrous oxide) is known to produce BIS values < 60 and abate recall and awareness. A recent study has now shown that sevoflurane 1.5% (0.75MAC when used with 50% nitrous oxide) is as effective in reducing BIS values to less than 60 and intraoperative awareness and recall as isoflurane. In comparison, the use of 1.0% sevoflurane (0.5 MAC) does not produce BIS values consistent with unconsciousness during cesarean section delivery). Of particular note, the use of 0.75 MAC sevoflurane in this study did not increase blood loss or cause uterine atony.

(Ref: Chin KJ, Yeo SW, et al: Bispectral Index Values at Sevoflurane Concentrations of 1% and 1.5% in Lower Segment

Tattoos and Spinal or Epidural Anesthesia

Is it safe to insert a needle through a tattoo while administering an epidural or spinal anesthetic? Theoretically, a pigment-containing tissue core from a tattoo could be deposited into the epidural, subdural or subarachnoid spaces, leading to later neurological complications. To answer this question, researchers from BC Women's Hospital in Vancouver, British Columbia, Canada conducted a Medline and EMBASE search for relevant publications using the keywords: epidural, spinal, tattoos, tattooing, complications. They found no information in the literature about possible risks from inserting needles through tattoos during the performance of neuraxial anesthesia. During the healing process, the pigments (inert metal salts combined with phenolphthalein bases) used in the tattooing process are rapidly absorbed by macrophages within the dermis or connective tissue. The pigments do not stay loose or become dislodged even if a needle is placed through the tattoo.

(Ref: Douglas MJ, Swenerton JE. Epidural anesthesia in three parturients with lumbar tattoos: a review of possible implications. Can J Anaesth. 2002 Dec;49(10):1057-60)



Identifying Landmarks for Proper Placement of Epidural or Spinal Anesthesia

A prospective volunteer study involving 100 adult volunteers of normal build (50 men and 50 women) in which Radiographs were taken of each volunteer in the supine, lateral decubitus, and fully flexed lateral positions. After positioning, radiopaque markers were affixed at the iliac crests, the lowest points of the rib cage, and on the midline of the back at the levels of the tenth rib and the iliac crests. Lumbar vertebral levels were determined by blinded examiners unaware of the study design and purpose. Results: The mean age of the volunteers was 45 years (range, 20 to 69 years), and the mean height was 167.9 cm in males and 155.8 cm in females. The mean body mass index was 22.8 in males and 24.1 in females. In the neutral position, Tuffier's line was at the L4 body in 48% of volunteers, the L4-5 interspace in 42%, the L5 body in 9%, and the L3-4 interspace in 1%. With flexion, Tuffier's line was at the L4-5 interspace in 47% of volunteers, the

L5 body in 27%, and the L4 body in 26%. In the neutral position, the tenth rib line was the L2 body in 75% of subjects, the L1-2 interspace in 20%, and the L1 body in 5%. In the flexed position, the 10th rib line was at the L1-2 interspace in 58%, the L2 body in 23%, and the L1 body in 19%.

(Ref: Jung C-W, Bahk J-H, et al. The Tenth Rib Line as a New Landmark of the Lumbar Vertebral Level During Spinal Block. *Anaesthesia* 2004; 59 (April): 359-363)