Epidural anaesthesia for laparoscopic cholecystectomy in a patient with scleroderma

Editor—We read the report by van Zundert and colleagues1 with great interest and also believe that regional anaesthesia is a good option for laparoscopic cholecystectomy in patients with severe pulmonary disease. We also would like to share our experience with a 38-year-old patient with scleroderma requiring laparoscopic cholecystectomy for recurrent cholecystitis. She had a 9-year history of scleroderma with skin, respiratory, cardiovascular and gastrointestinal system manifestations. Preoperative evaluation revealed dyspnoea, effort-induced palpitation, Raynauld’s phenomenon and movement restrictions in her extremities. Neck and extremity movements were severely restricted, and she had difficulty opening her mouth. Thoracic high-resolution computer tomography of both lungs showed a ground-glass appearance and local septal thickening of the basal parts of the posterior and lateral segments of the inferior lobes were seen. Regional anaesthesia was planned because of severe pulmonary and multiple visceral involvements, and the patient’s restricted mouth and neck movements.

Lateral positioning of the patient before the epidural procedure was quite difficult owing to restricted joint movement. Under sterile conditions, local anaesthesia was performed at the level of L1-L2 using prilocaine 2% (2 ml). The epidural space was 2 cm from the skin, and a catheter was inserted 6 cm cephalad. Prilocaine 2% (20 ml) was administered into the epidural space. As the effect of epidural anaesthesia began, warming and colour change in the patient’s lower extremities were noted. Ten minutes later, epidural anaesthesia was effective to the level of T4. Surgery was started after 12 min and completed by 62 min, without complications. Oxygen saturation levels obtained intraoperatively by pulse oximeter were 98–100%. The effect of epidural anaesthesia disappeared completely after 2.5 h. The patient was given NSAIDs twice and was free of pain in the postoperative 24 h. No additional doses of local anaesthetic via the epidural catheter were required.

Scleroderma (progressive systemic sclerosis) is a multisystem disease, involving the musculoskeletal, gastrointestinal, pulmonary, renal and cardiac systems, that can pose a significant challenge for the anaesthetist. It is important for the anaesthetist to determine the anaesthesia management in these patients to minimize potential complications. As van Zundert and colleagues noted, there is never a right way to anaesthetize such patients with severe pulmonary problems. Despite its obvious advantages when used in patients with scleroderma, regional anaesthesia may not always be preferable. The prolonged effect of local anaesthetics, technical difficulties owing to a thickened skin and the affected subcutaneous tissue, and difficulty in positioning patients may limit its utility. However, each case should be evaluated independently with regard to relative risks and the best outcome for either procedure in such a challenging condition as scleroderma.

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doi:10.1093/bja/ael260

Facilitated insertion of a nasogastric tube in tracheal intubated patients using the GlideScope

Editor—The insertion of a nasogastric tube in anaesthetized and intubated patients is sometimes difficult. It has been suggested that release of the endotracheal cuff would ease insertion of a nasogastric tube, by decreasing the compression of the oesophagus posteriorly through the membranous portion of the trachea. Various techniques of insertion have been described emphasizing the fact that as yet there is no simple and safe method.

The GlideScope® video Laryngoscope (GVL; Saturn Biomedical Systems Inc., Burnaby, BC, Canada) is a new intubating device, designed to provide a view of the glottis with alignment of the oral, pharyngeal and tracheal axes. Several studies have suggested that the GlideScope® may provide glottic views equal to conventional direct laryngoscopy1 and has potential advantage for difficult intubation.2,3 We would like to describe an alternative method for nasogastric tube insertion using the GlideScope®.

We have performed five consecutive nasogastric tube insertions in intubated patients under general anaesthesia using the GlideScope®. The blade of the GlideScope® was inserted first into the patient’s mouth to get the views of the pharyngeal and laryngeal area then the nasogastric tube was inserted via the nostril with lubrication until it reached the pharyngeal area. After that, the cuff of the tracheal tube was released and the nasogastric tube was advanced gently with the patient’s chin lifted. All the nasogastric tubes could be inserted smoothly in these patients without complications such as bleeding or mucosa injury, and visualized on the monitor of the GlideScope® system. The manoeuvres we present may facilitate improved nasogastric tube placement with the GlideScope®.
Life-threatening spontaneous intracranial hypotension responding to epidural blood patch

Editor—Following the recent case series of spontaneous intracranial hypotension (SIH) as an indication for epidural blood patch,1 we report a severe case presenting with a decreasing level of consciousness, leading to coma and requiring tracheal intubation. This patient was also treated successfully with an epidural blood patch.

A 68-year-old man presented with a 5-day history of worsening frontal headache and vomiting. His Glasgow Coma Scale, initially 14/15, deteriorated to 9/15 over the next 24 h. Brain imaging with CT scan was reported as showing increased attenuation in the basilar cisterns and the tentorium cerebelli, initially suggestive of subarachnoid haemorrhage. Subsequent review, however, identified these findings as SIH2 and led us to perform an MRI scan. By this time he was agitated and had developed apnoic episodes, bradycardia and hypertension. He was intubated and ventilated to enable MRI scanning and facilitate further management. The MRI scan showed bilateral, 8 mm subdural fluid collections overlying the frontal lobes, with effacement of cortical sulci and basal cisterns. Post-gadolinium enhanced images showed pachymeningeal enhancement supporting a diagnosis of SIH.3 He was transferred to the Intensive Care Unit and treated with an epidural blood patch consisting of 20 ml of sterile blood injected at the L3/L4 level. Twelve hours later his sedation was stopped, to allow him to wake and be extubated. His conscious level then recovered over the next few hours to a GCS of 15/15 with complete resolution of symptoms.

The literature suggests that the breach of the dura in SIH is most often at the cervical or thoracic level.4 In our patient, the site of the dural tear was unknown. Exactly how the ‘blind’ epidural blood patch causes benefit in these cases is unclear but, as in those reported by Buguet-Brown and colleagues,1 we found it to be rapidly effective.

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doi:10.1093/bja/ael262

Strong magnesium solution

Editor—The pain relief obtained by intra-articular magnesium sulphate after meniscectomy1 is impressive, but the concentration of magnesium is about 200 mmol litre−1 and the solution is hypertonic. The final concentration in the joint will naturally be affected by the volume of fluid residing after the surgery, and the tonicity of the solution may not be a major issue. However, the concentration of magnesium ions certainly is a problem. These concentrations are well away from normal and I would be concerned that they could cause tissue damage. Have these solutions been tested in animals, and the histological effects assessed? Perhaps the analgesia is a result of permanent nerve damage? I would strongly caution against any medical use of solutions such as these before we can be sure they do not cause damage.

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doi:10.1093/bja/ael262