body, accounting for 85% of all dislocations. Ninety-five per cent of shoulder dislocations are anterior. Ten per cent of these are associated with greater tuberosity fracture. Bilateral anterior dislocations after injury however are rare, mainly as the mechanism necessary to produce such injury is unusual.

Though there are controversies as to whether operative intervention is necessary in younger patients, in patients over for- ties, most surgeons agree that the first line of treatment would be conservative, as the re-dislocation rate in this age group is less likely. The best position to place the arm in for optimum results is also being re-evaluated. Classical rehabilitation with progressive passive and active physiotherapy of both shoulders is mandatory. The aim of the article is to report this rare injury and to highlight the mechanism that produces such injury.

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References


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Vascular complication following lipid free propofol injection

Sir,
Propofol is widely used in anaesthesia practice with established safety and efficacy. Recently, a lipid-free formulation (Cleofol 1%, Themis Medicare, Mumbai, India) has become available in the Indian market. This clear solution contains 10 mg of propofol and excipients to make 1 ml of the preparation. The details of the excipients are not available in the product information.

The product information states that thrombosis and phlebitis are rare on accidental extravasation and intrarterial injection in animals showed minimal tissue reaction. We report a suspected case of an unusual vascular complication following administration of this preparation.

A 55-kg, 35-year-old, ASA I female was posted for laparoscopic cholecystectomy under general anaesthesia. After placement of routine monitors, an 18G intravenous cannula was inserted in the most prominent vein on the dorsum of the left hand. Anaesthesia was induced with propofol 120 mg following administration of pethedine 60 mg. Tracheal intubation was facilitated with vecuronium bromide 6 mg. Maintenance of anaesthesia was done with vecuronium and intermittent positive pressure ventilation with 60% nitrous oxide and 0.6% isoflurane in oxygen. The same intravenous cannula was used to inject ceftriaxone 1 g, ondansetron 4 mg and lactated ringer’s solution during the procedure. After about one hour, when the procedure was about to end, swelling of the whole of the dorsum of the left hand was noticed. An extravasation was immediately ruled out as there was a good flow of the intravenous fluid without any swelling around the puncture site or around the cannula tip, which could be palpated easily. Further examination revealed that the palmer aspect had become dusky and the radial pulse could not be felt. It was suspected that the anti trendelenburg position along with a right side up tilt of the operating table for the procedure had caused a compression of the neurovascular bundle in the axilla leading to the problem. But interestingly, both the axillary and brachial pulsation could be felt normally as compared to the opposite side.

Immediately, the intravenous cannula was removed after placing another one in the right hand. A stellate ganglion block was performed on the left side using 15 ml of bupivacaine 0.5% followed by 5000 I.U. of intravenous heparin. Pulse oximeter probe, when applied to the fingers of the left hand did not display any reading.

Neuromuscular blockade was reversed uneventfully using neostigmine and glycopyrrolate in the usual dose. The patient’s left hand was wrapped in cotton wool with fingers exposed and was kept elevated. She could move her fingers on command. Approximately 30 min later, radial pulse reappeared and
the discoloration started to resolve. The pulse oximeter now displayed values normally when applied. A Doppler ultrasound revealed a normal study of radial and ulnar arteries and echocardiography did not reveal any vegetation in the heart. The patient was advised low molecular weight heparin for one week as a prophylactic measure and she recovered without any adverse sequel.

Kramer’s algorithm was used to determine whether the clinical manifestation described was an adverse drug reaction. Cleofol had a cumulative score of +3 while the rest of the agents injected through the same intravenous cannula had a score of +1. Thus, Cleofol was established as the most likely cause of this possible adverse drug reaction.

Tissue necrosis following extravasation of propofol has been reported in the literature. We had ruled out direct extravasation in this case. It is known that the kallikrein-kinin system in plasma is activated by contact with propofol to generate bradykinin. This bradykinin acts locally and makes the vein dilated and permeable. Perhaps by this mechanism the constituents of the drug had escaped the venous system and caused damage to the surrounding tissues, thus triggering the oedema and subsequent arterial compromise.

Very high incidence of thrombophlebitis (93%) has been reported following a formulation that did not contain soyabean oil. Cleofol is also known to damage the bivalve used for administration and this so far has not been a problem with the lipid emulsion preparations. Thus, in the case of propofol, a change in formulation seems to alter the safety profile.

The availability of this lipid-free solution avoids bacterial contamination of propofol and is welcome in clinical situations where lipid load is not desirable. But the present report poses a question mark on its safety in clinical anaesthesia.

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Ileal metastases from oesophageal carcinoma causing intestinal obstruction

Sir,

A 56-year-old male presented with dysphagia. Endoscopy revealed an ulcerative lesion in the lower oesophagus, extending from 30 cm to 35 cm. At surgery, the tumour involved the oesophagus without infiltration of the adjacent structures. A transthoracic oesophagectomy was performed and a tube of the stomach was anastomosed to the oesophagus to restore gastrointestinal continuity. Histopathological examination revealed a squamous carcinoma of the oesophagus with involvement of the paraesophageal and perigastric lymph nodes (pT3N1M0). He received 54 Gray of radiotherapy to the mediastinum postoperatively.

Eight months later, the patient presented with abdominal distension. X-rays of the abdomen suggested small bowel obstruction. A computed tomogram scan of the abdomen showed an ill-defined bowel mass in right sub-hepatic region, with minimal ascites. The liver did not reveal any metastasis. These findings prompted a laparotomy that showed a well-localized abscess in the right paracolic gutter. After draining the abscess and separating the adhered bowel loops, a mass was noticed in the ileum, approximately 6 to 7 cm proximal to the ileocaecal junction, with adhesions to the adjacent small bowel and caecum. This mass was causing stenosis of the ileum here, with proximally dilated bowel. A perforation was also present at the site of the mass. There was no other gross evidence of intra-abdominal disease. The mass was excised and a diverting ileostomy with distal ileal mucous fistula was fashioned in view of the peritoneal contamination and poor nutritional status.

Histopathological examination of the excised mass revealed keratinized squamous carcinoma involving the full thickness of the sub-mucosa. (Tumour was also present in the muscularis propria.) H/E, x10

Figure 1: Tissue section of ileum showing metastatic deposits of squamous carcinoma involving the sub-mucosa. (Tumour was also present in the muscularis propria.) H/E, x10