CASE REPORT

A 63-year-old female patient was diagnosed with persistent ilio-lumbar type II and III endoleaks with a 12cm aneurysm sac.

This occurred following endovascular aneurysm repair for a ruptured infra-renal abdominal aortic aneurysm 3 years previously.

On pre-operative assessment, she was found to be bedbound with multiple co-morbidities including type 2 diabetes, ischaemic heart disease, previous cadaveric renal transplant for end-stage renal failure, cerebrovascular disease and ankylosing spondylitis.

She had suffered a non-ST-elevation myocardial infarction 6 months previously and required one year of dual antiplatelet therapy following placement of a drug-eluting stent to the left anterior descending coronary artery.

A V-POSSUM score was calculated giving a morbidity and mortality risk of 98% and 58% respectively. Following an appropriate multi-disciplinary discussion with the patient, a laparotomy via a rooftop incision was planned for exploration and repair of the endoleak.

Effective analgesia was considered imperative for reducing post-operative morbidity. However, epidural catheter placement was contra-indicated due to dual antiplatelet therapy including clopidogrel. Bilateral erector spinae plane catheter (ESPC) insertion was considered as an alternative analgesic technique.

Following general anaesthesia, bilateral ESPC were placed in-plane ultrasound guidance. An initial bolus of 20mls 0.25% levobupivacaine was given bilaterally.

DISCUSSION

As well as providing excellent analgesia, the addition of CNB to general anaesthesia can reduce morbidity following high-risk surgery. Specifically, it has been shown to reduce the incidence of post-operative pneumonia by approximately 30%.

However, due to the risk of epidural haematoma, CNB is contra-indicated in patients requiring some antiplatelet therapies including clopidogrel. Although peripheral nerve block (PNB) is also relatively contraindicated in such patients, the potential benefit of reduced post-operative morbidity in high-risk patients may outweigh the risk of bleeding associated with PNB.

This risk can be mitigated if PNB is performed by an experienced operator, with the use of ultrasound and colour Doppler to facilitate safe needle trajectory.

ESPB may be classified as a PNB and has been shown to be efficacious for abdominal surgery.

As ESPB is a relatively new technique, the risk of haemorrhagic complications is not described in current guidelines.

We suggest that ESPC may provide a safer alternative to epidurals in patients on clopidogrel.

However, further work is needed to evaluate the risk of haemorrhagic complications in ESPB as well as other PNBs. Subsequent guidelines will help in assessing the risk/benefit balance in high-risk patients.