AN 80-yr-old man underwent hybrid thoracoabdominal aortic aneurysm repair using open and endovascular techniques. He had a cerebrospinal fluid (CSF) drain placed before the procedure for spinal cord protection by means of decreasing CSF pressure and promoting perfusion. It was removed on postoperative day 2, but replaced on postoperative day 3 because of lower extremity weakness. During both placements skin disinfection was achieved with povidone/iodine. Wide sterile fields were used and operators wore sterile gloves, hats, and masks. The CSF drain remained in place until the seventh postoperative day because as the lower extremity weakness recurred with trials of clamping. The patient became febrile to 102.7°F. He developed mental status changes and computed tomography of the head was obtained emergently. This revealed layering thick fluid in the occipital horns bilaterally with increased periventricular white matter hypodensity, indicating meningitis with pus in the ventricles. CSF analysis revealed abundant polynuclear cells and few gram-negative rods. The culture grew *Klebsiella pneumoniae*. The spinal drain was removed, and the patient was treated with broad-spectrum antibiotics. He slowly recovered and was eventually discharged to a rehabilitation facility with residual proximal leg weakness suggestive of mild anterior cord ischemia syndrome.

Placement of CSF drains has been shown to decrease the incidence of paralysis after thoracoabdominal aneurysm repair.1 Serious complications associated with CSF drains include intracranial hemorrhage2 and retained catheter fragments.3 Meningitis is a very rare complication of lumbar drains placed for spinal cord protection during aortic aneurysm repair.3 Longer duration of drainage and repeated procedures might increase meningitis risk. This case demonstrates that meningitis should be considered in patients with CSF drains placed for spinal cord protection that develop fever and altered mental status.

References