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Carbapenem-resistant *Klebsiella pneumoniae* in the CSF: Smile, please! We are taking photos

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Postneurosurgical Gram-negative ventriculitis is a serious, increasingly encountered complication, and the overall mortality has been reported to be high. A 40-year-old woman who had undergone surgery for a vestibular schwannoma had postoperative intracranial bleeding and hydrocephalus, and required prolonged (more than a month) external ventricular drainage (EVD) to control the hydrocephalus. The patient developed a carbapenem-resistant *Klebsiella pneumoniae* (CRKP) infection of the urinary tract and bloodstream. After a week, the CSF became positive for CRKP (Fig. 1).

She was readmitted to the neurosurgical intensive care unit for this severe infection. An endoscopic third

Fig. 1 CRKP colonies are visible (K) on all the ependyma and extend to the vegetation (A) interventricular foramina of Monro

ventriculostomy was performed to resolve the hydrocephalus and to remove the EVD. During the procedure, the image was taken endoscopically in the right cerebral ventricle. The in vivo imaging of CRKP colonies all over the ependyma is unique.

The patient received a combination of intravenous and intraventricular antibiotics (2 weeks intrathecal administration of colistin and gentamicin) with full resolution of the infection and complete recovery.

Conflicts of interest The authors declare no conflicts of interest.