



Lumbar Drains Do Not Affect Incidence of Postoperative Cerebrospinal Fluid Leak or Infection in Recent Posterior Fossa Tumor Patients

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Introduction

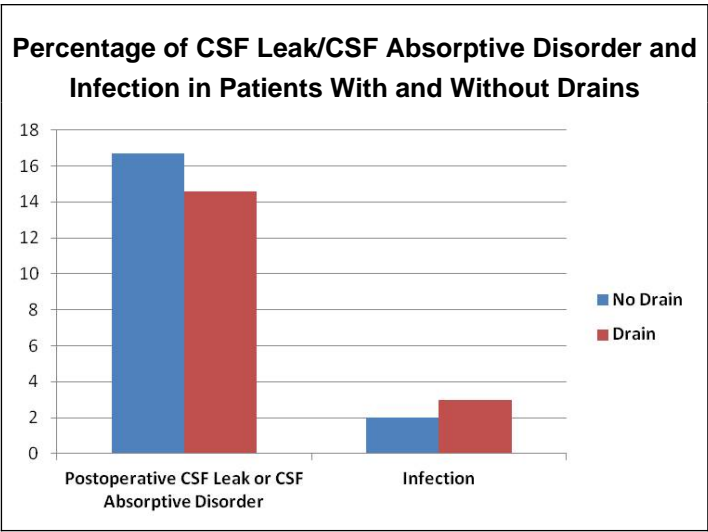
Lumbar drains are often placed just prior to posterior fossa craniotomies for tumor resection to improve intraoperative exposure as well as to prevent postoperative cerebrospinal fluid (CSF) leaks. As wound closure techniques, grafts, and dural sealants have improved over time, we sought to determine if lumbar drains still made a significant contribution in decreasing postoperative CSF leaks in recent posterior fossa tumor patients.

Methods

A retrospective review evaluated 120 patients who received posterior fossa craniotomies for tumor resection from 2004 to 2011. Patients’ charts were evaluated for demographics, comorbidities, type of tumor, surgical approach, placement of preoperative lumbar drain, incidence of postoperative CSF

Results

Of the 120 patients evaluated, 50 patients (41.7%) received retrosigmoid craniotomies, 48 (40%) translabyrinthine, 9 (7.5%) far lateral, 3 (2.5%) suboccipital, 3 (2.5%) combined retrosigmoid/translabyrinthine, 3 (2.5%) transtemporal, 2 (1.7%) infratemporal, and 2 (1.7%) transcochlear. 85 patients received preoperative lumbar drains, 4 patients received intraoperative external ventricular drains, 1 patient had an existing ventriculoperitoneal shunt, and 30 patients received no external source of CSF drainage. 5 patients without lumbar drains (16.7%) and 13 (14.6%) with lumbar drains or EVDs demonstrated a CSF absorption disorder postoperatively either by CSF leak, pseudomeningocele, or hydrocephalus requiring a shunt. Neither this incidence nor the incidence of infection was statistically significant between groups.



Conclusions

In the recent BNI experience, lumbar drains and EVDs have not had an effect on the incidence of postoperative CSF leaks, pseudomeningoceles, shunting, or surgical site infections after posterior fossa craniotomies.

Learning Objectives

To identify the incidence of CSF leaks, pseudomeningoceles, shunting, or surgical site infections after posterior fossa craniotomies with and without lumbar drains.

References

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