



Pseudomeningoceles: What should we do? An International Survey Study

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Introduction

Pseudomeningoceles are common complications after surgery. These lesions may present with pain, intracranial hypotension, and CSF leak related infection. Management guidelines are lacking and anecdotally we have encountered suggested treatments with significant potential morbidity. With this study we hope to determine the prevailing opinions on the management of this condition.

Methods

Neurosurgeons from around the world were invited to participate in a 33-question web based survey on the management of pseudomeningoceles, preseneted as simulated scenarios after posterior fossa and spinal intradural surgery.

Results

241 responses were obtained.

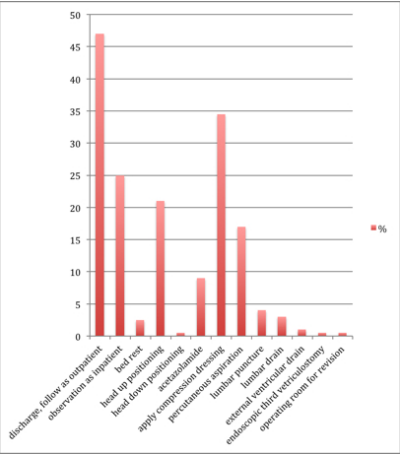
When faced with a cranial pseudomeningocele without hydrocephalus, most would manage conservatively for an average of 7 to 14 days before taking the patient to the operating room for a definitive repair. Only 0.5% of surgeons would offer upfront repair of the pseudomeningocele.

In the presence of ventriculomegaly, 48% would intervene with CSF diversion and would change therapy if the lesion did not resolve in 2 to 4 days.

90% of surgeons manage spinal pseudomeningoceles non operatively for 7 to 14 days before re exploration is considered.

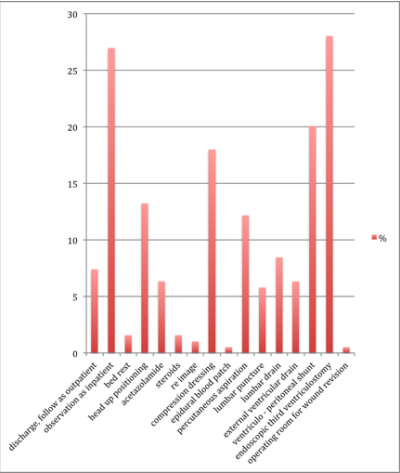
The most common steps taken to prevent pseudomeningoceles are watertight closure, tissue glues, and duroplasty.

Management of Cranial Pseudomeningoceles without Hydrocephalus



n = 200

Management of Cranial Pseudomeningoceles with Hydrocephalus

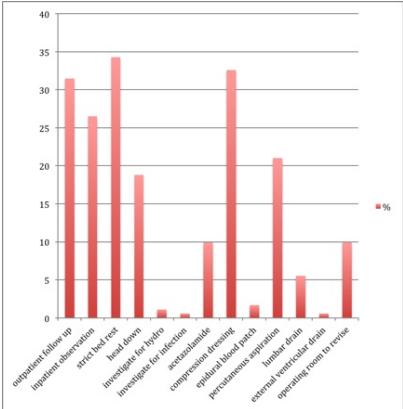


n = 189

Conclusions

We hope that this study generates discussion surrounding a commonplace topic in many practices. The present zeitgeist suggests that initial observation in the absence of ventriculomegaly is appropriate for cranial and spinal pseudomeningoceles. Operative revision should be reserved for failure of initial management. If ventriculomegaly is present, consideration should be made for upfront CSF diversion. We believe that this study may serve as a guideline regarding acceptable management.

Management of Spinal Pseudomeningocele



n = 181

Learning Objectives

By the end of the session, participants should be able to: 1) define a pseudomeningocele; 2) identify some common complications associated with pseudomeningoceles; 3) discuss current treatment strategies for pseudomeningoceles; 4) identify the current zeitgeist on management of cranial and spinal pseudomeningoceles

References

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