

Post-cranial neurosurgery *Cutibacterium acnes* infections: clinical correlates, presentation, and outcomes: a matched case-case-control study

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*** Supplementary material ***

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Immunosuppression definition

Immunosuppression was defined as any form of immune suppression, including corticosteroid therapy (>20 mg of prednisone equivalent dose for more than 3 weeks); use of other immunomodulatory agents, anti-rejection immunosuppressants, or chemotherapy; primary immunodeficiency; or acquired immunodeficiency syndrome (AIDS).

Table S1. Classification of cranial neurosurgical procedures into major and minor.

Procedure ICD-9 code	Classification Category
AWAKE CRANIOTOMY	Major procedure
CRANIECTOMY	Major procedure
CRANIECTOMY 5042	Major procedure
CRANIOPLASTY	Major procedure
CRANIOPLASTY 5043	Major procedure
CRANIOTOMY	Major procedure
CRANIOTOMY 5044	Major procedure
CRANIOTOMY AND CRANIECTOMY	Major procedure
CRANIOTOMY AND CRANIECTOMY 5044+5042	Major procedure
DECOMPRESSIVE CRANIECTOMY	Major procedure
OTHER CRANIECTOMY	Major procedure
OTHER CRANIOTOMY	Major procedure
REMODELLING OF SKULL	Major procedure
REMOVAL OF BONE FLAP OF SKULL	Major procedure
REMOVAL OF BONE FLAP OF SKULL 5048	Major procedure
REMOVAL OF BONE FRAGMENTS OF SKULL	Major procedure
REMOVAL OF BONE FRAGMENTS OF SKULL 5049	Major procedure
REMOVAL OF CRANIAL A.V.M., COMPLETE	Major procedure
REMOVAL OF CRANIOPLASTY	Major procedure
REMOVAL OF CRANIOPLASTY 5050	Major procedure
REMOVAL OF INTRACRANIAL OMMAYA RESERVOIR	Major procedure
REMOVAL OF SKULL TUMOR	Major procedure
REMOVAL OF SKULL TUMOR COMPLETE 5052	Major procedure
REMOVAL OF SKULL TUMOR, COMPLETE	Major procedure
REMOVAL OF SKULL TUMOR, INCOMPLETE	Major procedure
VASCULAR DECOMPRESSION OF CRANIAL NERVE	Major procedure
VASCULAR DECOMPRESSION OF CRANIAL NERVE 5217	Major procedure
REPLACEMENT DUAL CRANIAL NEUROSTIMULATOR GENERATOR FOR MOVEMENT DISORDERS 618855	Minor procedure
REPLACEMENT DUAL CRANIAL NEUROSTIMULATOR GENERATOR, FOR MOVEMENT DISORDERS, RECHARGEABLE 645908	Minor procedure
REPLACEMENT OF CRANIAL NEUROSTIMULATOR GENERATOR FOR MOVEMENT DISORDERS, OTHER 645904	Minor procedure
REPLACEMENT SINGLE ARRAY CRANIAL NEUROSTIMULATOR PULSE GENERATOR FOR MOVEMENT DISORDERS 618854	Minor procedure
THIRD VENTRICULOSTOMY	Minor procedure
VENTRICULAR SHUNT TO ABDOMINAL CAVITY AND ORGANS	Minor procedure
VENTRICULOSTOMY	Minor procedure
VENTRICULOSTOMY ENDOSCOPIC 622003	Minor procedure
EVD VENTRICLEAR	Minor procedure
IMPLANTATION OF CRANIAL IMPLANTABLE PULSE GENERATOR AND BRAIN LEADS 959720	Minor procedure
IMPLANTATION OF CRANIAL IMPLANTABLE PULSE GENERATOR WITHOUT LEADS (SECOND PHASE) 959724	Minor procedure
INSERTION OF VENTRICULO-CARDIAC SHUNT	Minor procedure
INSERTION OF VENTRICULO-CARDIAC SHUNT 5172	Minor procedure
INSERTION OF VENTRICULO-PERITONEAL SHUNT	Minor procedure
INSERTION OF VENTRICULO-PERITONEAL SHUNT 5173	Minor procedure
INSERTION OF VENTRICULO-PLEURAL SHUNT	Minor procedure

INSERTION OF VENTRICULO-PLEURAL SHUNT 5174	Minor procedure
INSERTION OR REPLACEMENT OF EXTERNAL VENTRICULAR DRAIN [EVD] 5171	Minor procedure
INTRACRANIAL INSERTION OF OMMAYA RESERVOIR	Minor procedure
INTRACRANIAL INSERTION OF OMMAYA RESERVOIR 5185	Minor procedure

Figure S1. Study design

