

Supplementary Materials

Table S1. Demographic data of spontaneous and non-spontaneous CSF leak.

	Spontaneous	Non-spontaneous	<i>p</i> -value
Patient number	20	61	
Height (cm)	164±66	165±63	0.36
Body weight (kg)	64.4±13.1	65.7±13.3	0.36
BMI	23.8±11.6	24.2±23.1	0.33

Table S2. Detailed results of Fisher's exact test on binominal data of Table 2

Head : rhinorrhea

	Sphenoid surgery	Spine surgery	Skull base surgery	Calvarial surgery	Lumbar puncture	Trauma
Sphenoid surgery	-	0.0011	0.6244	0.4118	0.0075	0.6924
Spine surgery	-	-	0.0027	1	1	0.001
Skull base surgery	-	-	-	0.333	0.010	1
Calvarial surgery	-	-	-	-	1	0.333
Lumbar	-	-	-	-	-	0.004

puncture						
Trauma	-	-	-	-	-	-

Meningitis

	Sphenoid surgery	Spine surgery	Skull base surgery	Calvarial surgery	Lumbar puncture	Trauma
Sphenoid surgery	-	0.0157	1	1	0.2719	0.6618
Spine surgery	-	-	0.0543	0.1429	1	0.1355
Skull base surgery	-	-	-	1	0.1923	0.584
Calvarial surgery	-	-	-	-	0.3	1
Lumbar puncture	-	-	-	-	-	0.4967
Trauma	-	-	-	-	-	-

Conservative

	Sphenoid surgery	Spine surgery	Skull base surgery	Calvarial surgery	Lumbar puncture	Trauma
Sphenoid surgery	-	0.2966	1	1	0.0657	1

Spine surgery	-	-	0.3509	1	0.3783	0.2344
Skull base surgery	-	-	-	1	0.1026	1
Calvarial surgery	-	-	-	-	0.5	1
Lumbar puncture	-	-	-	-	-	0.0491
Trauma	-	-	-	-	-	-

Surgery

	Sphenoid surgery	Spine surgery	Skull base surgery	Calvarial surgery	Lumbar puncture	Trauma
Sphenoid surgery	-	0.2966	1	1	0.0013	1
Spine surgery	-	-	0.3509	1	0.0202	0.2344
Skull base surgery	-	-	-	1	0.0047	1
Calvarial surgery	-	-	-	-	0.0667	1
Lumbar puncture	-	-	-	-	-	0.0023
Trauma	-	-	-	-	-	-

Blood patch

	Sphenoid surgery	Spine surgery	Skull base surgery	Calvarial surgery	Lumbar puncture	Trauma
Sphenoid surgery	-	1	1	1	0.083	1
Spine surgery	-	-	1	1	0.007	1
Skull base surgery	-	-	-	1	0.4615	1
Calvarial surgery	-	-	-	-	1	1
Lumbar puncture	-	-	-	-	-	0.1373
Trauma	-	-	-	-	-	-

MRI with CSF accumulation

	Sphenoid surgery	Spine surgery	Skull base surgery	Calvarial surgery	Lumbar puncture	Trauma
Sphenoid surgery	-	0.0122	0.1328	0.517	0.1243	0.4517
Spine surgery	-	-	0.0006	0.015	0.0002	0.1975
Skull base	-	-	-	1	1	0.0427

surgery						
Calvarial surgery	-	-	-	-	1	0.2088
Lumbar puncture	-	-	-	-	-	0.0377
Trauma	-	-	-	-	-	-

Recurrence

	Sphenoid surgery	Spine surgery	Skull base surgery	Calvarial surgery	Lumbar puncture	Trauma
Sphenoid surgery	-	0.4479	0.5325	1	0.5257	0.3919
Spine surgery	-	-	0.277	0.5263	0.1372	1
Skull base surgery	-	-	-	1	1	0.2374
Calvarial surgery	-	-	-	-	1	0.5055
Lumbar puncture	-	-	-	-	-	0.119
Trauma	-	-	-	-	-	-

