

Clinical Outcomes in Idiopathic Intracranial Hypertension

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Learning Objectives

1.Learning the relative frequency of presenting symptoms of IIH.

2.Review of the basics for IIH treatment

3.Assessment of relation between BMI and highest venous pressure and pressure gradient.

Introduction

There is limited data on the safety and effectiveness of venous sinus stenting for idiopathic intracranial hypertension (IIH).

Methods

We present a single-center retrospective study of 57 cases of IIH. JMP Pro Version <13> (SAS Institute Inc., Cary, NC, 1989-2016) was used for statistical analysis.

Results

A total of 57 patients were included in the analysis. The study group was composed of 95% female and 5% male patients whose mean age at the time of treatment was 35.8 years (range 17-63) and median BMI was 33.8 kg/m2 (range 21.4-57.1). The most common symptoms encountered were papilledema (53%) visual acuity changes (53%), visual obscuration (46%) and blurred vision (12%). Tinnitus and diplopia were present only in 9% of the population. Median highest venous pressure and median pressure gradient were 27 (range 7 -70) and 15 (range 0-50) mmHg. Medical treatment with acetazolamide was attempted in 51% patients while 65% of the patients underwent venous sinus stent placement. Among the latter, antithrombotic treatment prior to stenting consisted of aspirin (74%) and clopidogrel (79%). Stenting led to resolution of stenosis in 92% of patients with a complication rate of 8%. Median length of hospital stay of the stented patients subgroup was 1 day (range 0-13 days). Multivariate regression analysis showed that BMI was not significantly correlated with venous pressure or pressure gradient after adjusting for age, gender and presenting symptoms.

Conclusions

Our findings provide additional evidence of the relative frequency of IIH presenting symptoms and confirm that stenting is a safe and effective treatment for pseudotumor cerebri. Further studies are needed to better characterize the heterogenous presentation of IIH, optimal timing of treatment and follow-up and the impact of high BMI on the pathophysiology of IIH.

References

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