2025/06/30 03:37 1/2 Sinus pericranii treatment

Sinus pericranii treatment

Accepted guidelines or recommendations concerning the management, diagnosis, and treatment of sinus pericranii are still lacking.

Angiography plays a crucial role in the classification of SP and choice of the optimal treatment. Only accessory SP is amenable to treatment, whereas dominant SP must be preserved.

Ellis et al describe a simple and unique method for determining whether intracranial venous outflow may be compromised by sinus pericranii treatment. This involves performing catheter angiography while the lesion is temporarily obliterated by external compression. Analysis of intracranial venous outflow in this setting allows visualization of angiographic changes that will occur once the sinus pericranii is permanently obliterated. Thus, the safety of surgical intervention can be more fully appraised using this technique ¹⁾.

There were notable improvements following surgical resection for the abnormal venous lesions and several sclerotherapies ²⁾

Intraoperative hemostasis is essential while sinus pericranii is detached from the cranium. Hemostatic agents such as bone wax or absorbable gelatin and heat coagulation seem to be useful. However, complicative hemorrhage concerning to the preceded technique has been also reported. To detect minor shunting points between the sinus pericranii and the intracranial veins, the major venous connection can be manually compressed. Intraoperative manual compression of a major venous connection of sinus pericranii can be an option to manage intraoperative bleeding ³⁾.

Endovascular treatment

The endovascular approach is becoming increasingly relevant and has proven to be safe and effective

The surgical treatment involves the resection of the extracranial venous package and ligation of the emissary communicating vein. In some cases of SP, surgical excision is performed for cosmetic reasons. The endovascular technique has been described by transvenous approach combined with direct puncture and the recently endovascular embolization with Onyx ⁵⁾.

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Last update: 2024/06/07 02:53

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