

Meningioma resection in a Jehovah's Witness patient: use of autologous transfusion and religious challenges

Resección de meningioma en un paciente testigo de Jehová: uso de transfusión autóloga y desafíos religiosos Ressecção de meningioma em paciente testemunha de Jeová: uso da transfusão autóloga e desafios religiosos

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Submission: 11-26-2024 Approval: 01-05-2025 **Introduction:** The religious beliefs of Jehovah's Witnesses pose a major challenge when surgical procedures are necessary. Members of this religious community believe that transfusions of homologous blood or blood products violate divine laws. It is essential to understand that for Jehovah's Witnesses, once blood has left the body's circulation, it can no longer be used as replacement fluid¹.

Objective: Report the case of assistance to a Jehovah's Witness patient and the religious challenges faced.

Methodology: This is a case report with a descriptive approach. AGS, a 33-year-old female, presented episodes of dysarthria and non-dimidiate paresis for 2 weeks. Due to this, she underwent tomography which showed a large expansive left frontotemporal lesion, possibly extra-axial, slightly hyperdense, with intense contrast uptake and a central hypodense focus, which is associated with bone hyperostosis in the greater wing of the sphenoid, associated with vasogenic edema in the adjacent parenchyma, with effacement of the sulci, compression of the left lateral ventricle, and dilation of the midline to the right by 1.3 cm. The patient said that she could not receive a blood transfusion since she is a Jehovah's Witness. Based on this, the patient underwent, for tumor resection, an enlarged left pterional craniotomy with microsurgery. The autologous blood transfusion system was used to correct blood loss through the Intraoperative Blood Salvage Machine (RIOS/Cell Saver system). The surgical specimen was sent for biopsy, and the pathological anatomical result showed it to be a WHO grade 1 meningioma, with meningothelial subtype, high cellularity, and mild pleomorphism.

Results and Discussion: The acceptance of autologous transfusion by Jehovah's Witnesses is related to the belief that the transfusion device is an extension of their body's circulation. This concept supports the use of the Intraoperative Salvage Machine, and many members of this religious group are in favor of it, according to their convictions, which consists of recovering red blood cells from blood that is aspirated, filtered, and transferred through a continuous circuit. For those who accept this method, all autologous blood should be used only during the operation and not postoperatively^{1,2}.

Final Considerations: In surgeries involving the removal of tumors, neoplastic cells may be aspirated, pass through the filter, and be reinserted, potentially spreading them. Autologous transfusion may be inadequate in surgeries involving large blood losses and may not guarantee patient safety.



References

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