Utility of indocyanine green videoangiography in subcortical arteriovenous malformation resection

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Subcortical arteriovenous malformations (AVMs) are surgically challenging. Localization is crucial for eloquent areas, and complete resection evaluation is uncertain. Indocyanine green videoangiography (ICG-VA) can assist this surgery. An illustrative video of a subcortical frontoparietal bleeding AVM resection assisted by ICG-VA is presented. A bleeding arterial feeder aneurysm was embolized in the acute phase to protect against rebleeding. ICG-VA helped to detect the AVM's superficial arterialized draining vein, distinguishing it from normal cortical veins. This enabled a customized sulcus approach. ICG-VA showed normalized flow through the previously arterialized vein, confirming the AVM's complete resection. This applies when there is a single drainage remaining.

The video can be found here: <https://youtu.be/L7yJEE66kV0>.

KEYWORDS AVM; brain arteriovenous malformation; subcortical AVM; indocyanine green videoangiography; ICG-VA

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