BM-09. USE OF NEUROENDOSCOPY TO SAFELY DELIVER INTRATHECAL CHEMOTHERAPY AT THE TIME OF OMMAYA RESERVOIR PLACEMENT
Ray Chu, Jeremy Rudnick, and Ronald Natale; Cedars-Sinai Medical Center, Los Angeles, CA, USA

BACKGROUND: For patients with carcinomatous meningitis, treatment needs to be expedited, especially for patients with hematologic malignancies. Using neuroendoscopy as an adjunct at the time of ventricular reservoir placement allows immediate confirmation of catheter placement rather than waiting for a post-operative CT scan and waiting for contact from the surgeon. This confirmation allows delivery of intrathecal chemotherapy at the time of surgery saving the patient delays in chemotherapy delivery and potential side effects of the first chemotherapy delivery, as they are still under general anesthesia. Delay in confirmation of appropriate catheter placement or poor catheter placement delays treatment; this technique also allows the surgeon and oncologist to know definitively that the reservoir is properly positioned and functional at the time of surgery. METHODS: Five patients with carcinomatous meningitis who were candidates for intrathecal chemotherapy were prospectively followed. All of them had a ventricular reservoir placed with neuroendoscopy and immediate delivery of intrathecal chemotherapy. RESULTS: All five of the patients had a reservoir placed without incident. Four of the patients had chemotherapy delivered during surgery without incident. For one patient, there was a pharmacy delay, but the chemotherapy was delivered while the patient was still recovering from anesthesia. There were no complications related to the treatment. CONCLUSIONS: Neuroendoscopy has the power to immediately confirm proper ventricular placement of an Ommaya reservoir and to safely allow the delivery of intrathecal chemotherapy in the operating room. This technique eliminates delays in chemotherapy delivery and is safe.