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Ventilation and Perfusion in Patients with Extreme Agitation: At Hennepin County Medical Center's Emergency Department.

This project was created by Dr. James Miner, M.D. and Zabrina Warzonek through the Research Associates Program (RA) at Hennepin County Medical Center's (HCMC) Emergency Department. As a research associate, I have been working to continue the study, through data collection, as created by Dr. Miner and Ms. Warzonek. As outlined by Ms. Warzonek, in her project abstract:

The study was designed to address patients who present to the ED with excited delirium requiring emergent restraint using both physical and chemical means. Patients with excited delirium have been observed to periodically suffer metabolic acidosis and cardiac arrest before, during and after the placement of restraints, both chemical and physical. The causes of this have not been well defined. It has been proposed that the acidosis and periodic arrest seem in these patients may be due to decreased peripheral perfusion, decreased ventilatory efficiency, or some combination of the two. The goal is to determine the status of their tissue perfusion using near infrared tissue hemoglobin oxygen saturation (StO₂) and the ventilatory status using nasal sample end-tidal carbon dioxide (ETCO₂) monitoring. The principle aim of this study is to determine whether patients with excited delirium have normal perfusion while they are restrained, and if they exhibit normal breathing patterns.



Poster Number: Session: