

One in five ICU deaths are misdiagnosed

A study, published in *Chest*, the journal of the American College of Chest Physicians (ACCP), has shown that one out of every five deaths occurring in medical intensive care units (MICU) was misdiagnosed. In almost half of these cases, a correct diagnosis would have resulted in different treatment -- and possibly saved the patient's life.

Researchers reviewed the records of 1,800 admissions, over a two-year period, to the MICU at the Cleveland Clinic Foundation in Cleveland, Ohio, where there are state-of-the-art diagnostic facilities. They set out to assess the accuracy of clinical diagnosis as compared to postmortem findings, and to also assess whether premortem knowledge of the autopsy findings would have altered patient management.

Of the 1,800 patients admitted to the MICU, 401 died. Autopsies were performed on 91 (22.7%) of these patients. Those receiving autopsies were younger than those who did not, but there were no significant differences in other categories such as sex, race, and length of stay.

Eighteen of the 91 patients (19.8%) who underwent autopsy were found to have a different diagnosis from that which was made clinically. The diagnostic errors were classified in two categories.

Class 1 errors were major misdiagnosis with direct impact on therapy. Class 2 diagnostic errors comprised major unexpected findings that probably would not have changed therapy. Of the 18 misdiagnosed patients, eight were considered as class 1 or major misdiagnosis.

Dr. Alejandro C. Arroliga and his colleagues noted that various studies have concluded infection is one of the most frequently overlooked diagnoses, accounting for 25% of the misdiagnoses. They added that pulmonary embolism has also been a most common misdiagnosed condition. In the Cleveland Clinic study, he said, two patients died from massive pulmonary embolism that was not suspected clinically.

SOURCE: "A Study of Consecutive Autopsies in a Medical ICU," *Chest*, 2001; 119:530-536.