## Case 8

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This 68 year old man underwent an aorto-bifemoral bypass operation in a peripheral hospital . There were no intra-operative complications. Several hours post-operatively the patient developed acute renal failure followed shortly by congestive heart failure and pulmonary edema.

Twenty-four hours post-op. the patient was noted to be drowsy but arousable and still responding to questioning. Seventy-two hours post-op. the patient's mental status had worsened and was now described as somnolent with brief apneic episodes. The patient was then transferred to the Kingston General Hospital where he was found to be drowsy, and was disoriented to time and place, but responding to commands and was disoriented to time and place. There were no focal signs. Blood pressure was stable, but the respiratory rate was 10 with prolonged apneic periods. Blood gases on admission were pH 7.35, pCo<sub>2</sub>29, HCO<sub>3</sub>16. Creatinine was six times normal and the BUN was 4 x normal. CT scanning, EEG and LP results were normal.

By 48 hours following admission the patient was unresponsive. Apneic spells lasted up to 40-50 secs with pH dropping to 7.24 while asleep. Three days following admission the patient suffered a cardiac arrest while in the dialysis unit. During the arrest the pH dropped to 7.16. Nearly 50 minutes elapsed before the systolic blood pressure climbed over 100 mmHg while at the same time the pH was 7.38.

The patient failed to regain consciousness and after several isoelectric EEG's ventilatory support was withdrawn. The patient died 6 days following his operation. He had been ventilated for approximately 12 hours following his arrest.

General Autopsy findings revealed marked aortic atherosclerosis with a status post-aortofemoral by-pass, acute tubular necrosis and pulmonary edema.

Gross examination of the brain showed a small old right frontal infarct and cerebral edema with diffuse softening and discoloration of the white matter in places hemorrhagic.

Materital submitted: 1 Kodachrome

1 slide (Solochrome H and E)

Points for discussion - Diagnosis Pathogenesis