

Case #1

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The patient was a 47-year-old male who had been seen for 12 years for various complaints. His first admission related to cardiac symptomatology was approximately 1 ½ years earlier, when he entered the hospital with chest pain and shortness of breath. Several admissions for myocardial infarctions had followed over the next few months. Coronary bypasses were then performed for occlusive coronary disease in an 8 ½ hour operation utilizing a pump oxygenator. The day following the surgery, he was "alert and feeling well". On the third postoperative day, he suffered a tachyarrhythmia but by noon that day, he was "happy and alert". An hour later, he suffered a cardiac arrest and a resuscitation attempt was unsuccessful.

At autopsy, the heart weighed 660 gm and showed moderate ventricular dilatation; the foramen ovale was closed and there were multiple areas of myocardial scars, including the lower 2/3rds of the interventricular septum. The two saphenous vein bypasses were in place and intact. There was mild hepatosplenic enlargement. The rest of the viscera were in place and intact. There was mild hepatosplenic enlargement. The rest of the viscera were grossly normal. The cerebral and cerebellar hemispheres showed multiple 1-2 mm punctate red-brown lesions in the white matter. There were a few soft, red-brown lesions up to 8 mm in the deep cerebellar white matter.

Microscopic sections of cerebrum are stained with hematoxylin and eosin.

Points for discussion:

1. What is the cause of the brain purpura?
2. What is the relationship of the brain purpura to morbidity and mortality in patients on cardio-pulmonary bypass?
3. Does this even occur often?