


CARDIOVASCULAR FLASHLIGHT

Purulent pericarditis caused by a bad tooth

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A 14-year-old male was admitted for chest distress. Eight days ago, he picked his decayed tooth and experienced bleeding (Panel A, the arrow points to the bad tooth). An expansile submaxillary mass, diagnosed as cellulitis, appeared in 2 days (Panel B, CT showing the mass). Antibiotics were started and operative drainage was adopted (Panel C). But there was little improvement in the patient’s condition and he began feeling chest distress. An echocardiogram showed much fluid in the pericardial cavity (Panel D). Ultrasound-guided percutaneous centesis was performed, and 1000 mL of pericardial pus was drained. The pus was sent for testing. Streptococcus anginosus was cultured, which was sensitive to vancomycin. Three days after vancomycin treatment, the amount of drained liquid decreased significantly. But another echocardiogram showed that there was still much pericardial pus. Another centesis was done, but unfortunately, the drainage tube lacerated the heart (Panel E, the right and left arrow points to the first and second drainage tube, respectively; Panel F, CT showing the thickened pericardium and drainage tubes).

During operation, lots of pus effused from communicated pretracheal space and retrosternal space. After the dropsical and thickened pericardium was cut open, considerable purulent secretion mixed with cellulose exudation was seen attached to the external surface of the heart (Panel G). The pus was cleared carefully, and most of the pericardium was cut off to release the heart. After the drainage tube, which pricked into the right ventricle, was pulled out, the injured heart was sutured. The pericardial cavity was washed with iodophors and normal saline at the end (Panel H). The patient tolerated the procedure well and was discharged after another 2 weeks of treatment with vancomycin. The occurrence of pericarditis owing to teeth problems is very rare. Moreover, purulent pericarditis caused by Streptococcus anginosus is also a rare.

Panels A–H. LV, left ventricle; RV, right ventricle; PS, pericardial space.

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