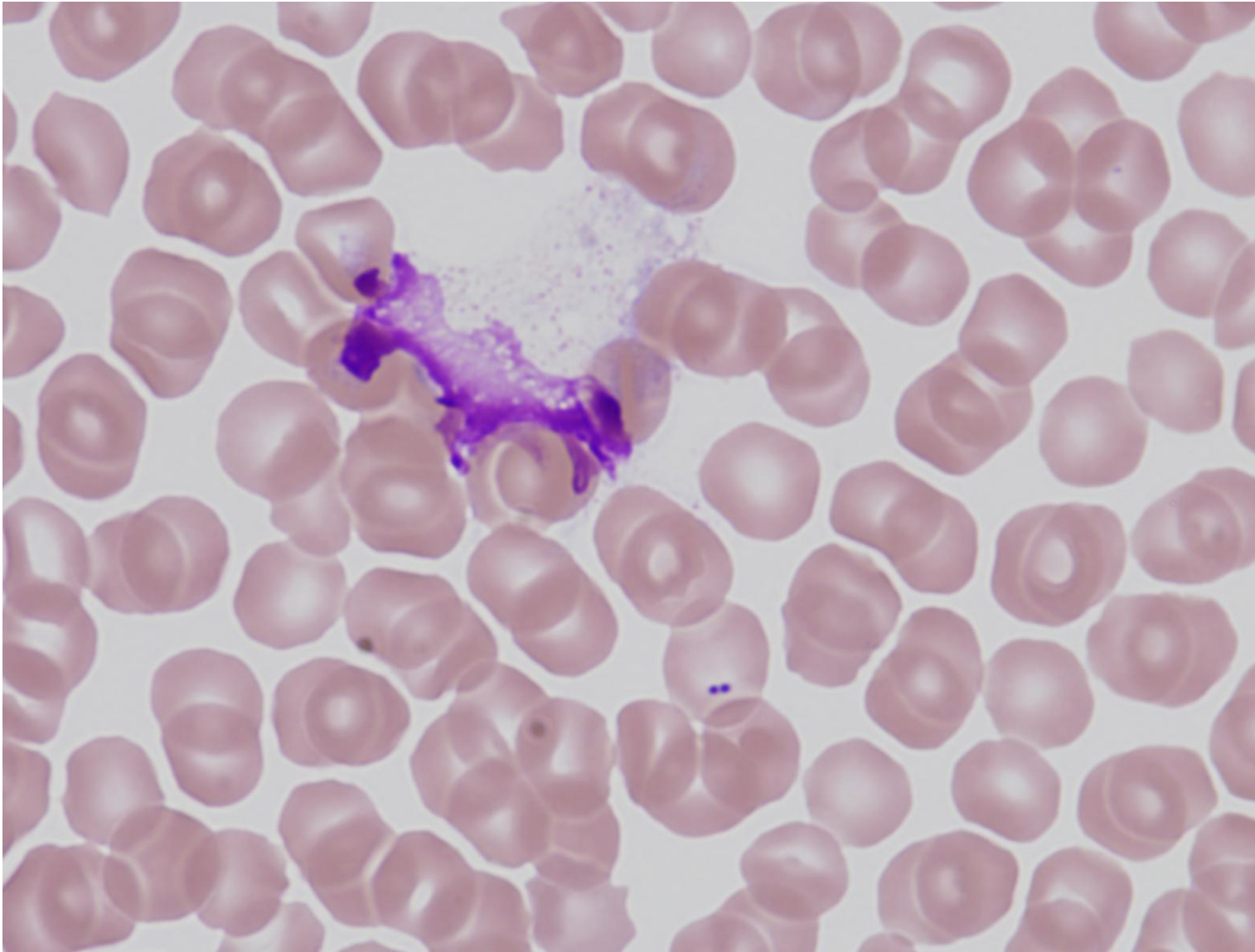


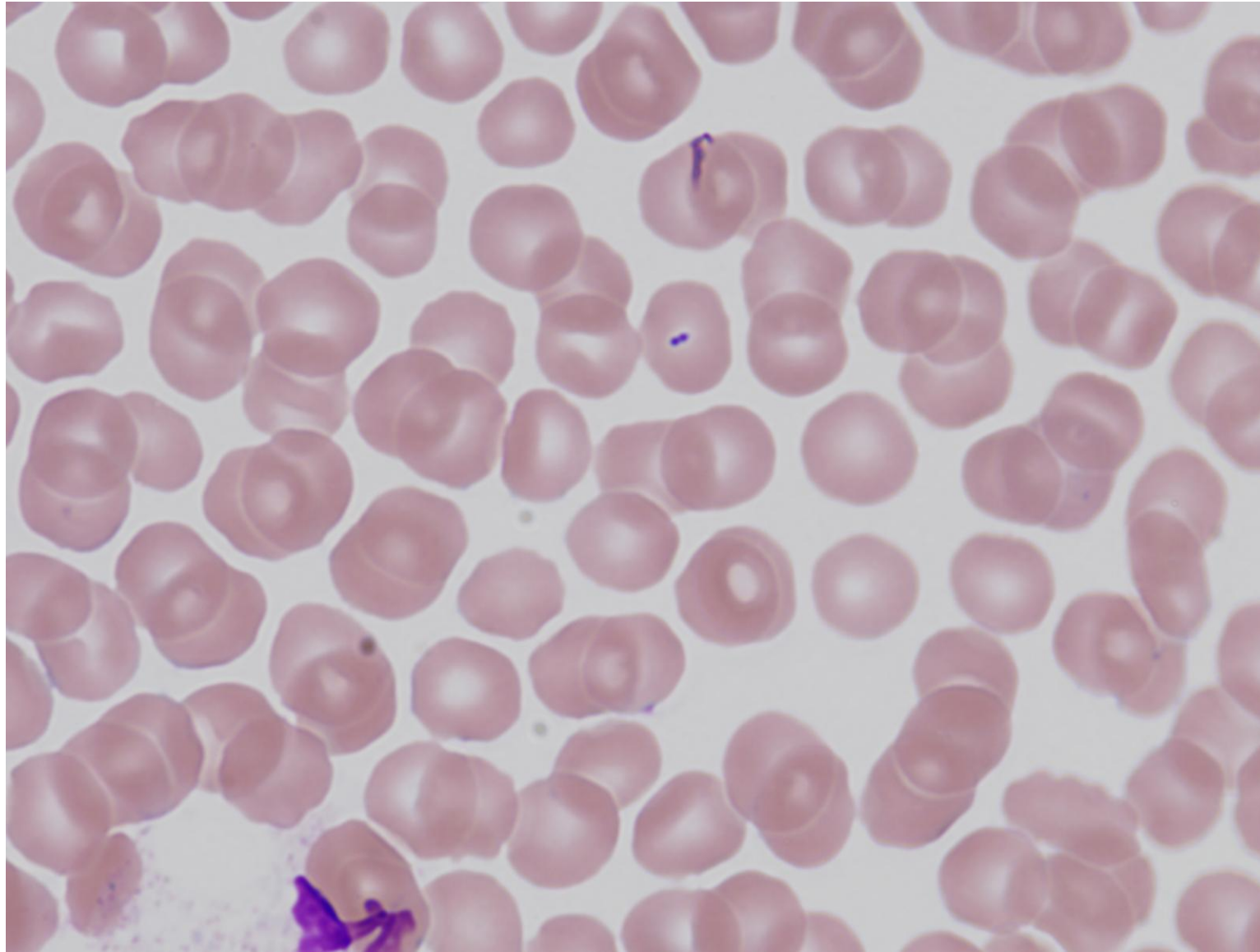
Fulminant *Streptococcus suis* infection

Streptococcus suis represents a primary health problem in the swine industry worldwide. *S. suis* is an emerging zoonotic pathogen with high pathogenicity, causing severe human infections, such as arthritis, meningitis and septicemia. Endophthalmitis, uveitis and peritonitis are also seen. Meningitis is the most common presentation of infection. Microbiological distinction from viridans group streptococci is needed. The mortality rate is particularly high in splenectomized individuals. In China, outbreaks of *S. suis* infection has occurred, in association with the slaughter, preparation or consumption of pigs.

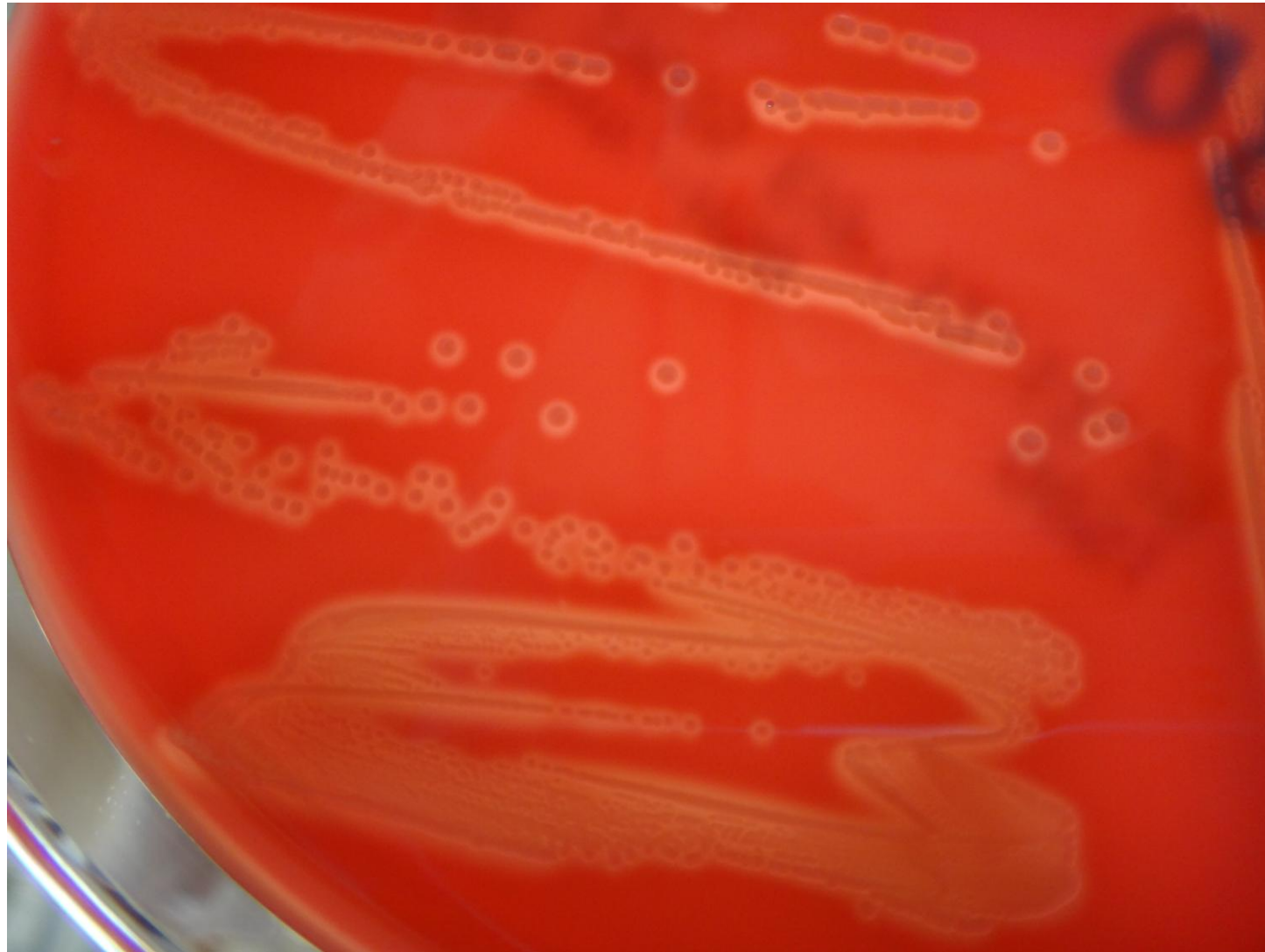
Ref.: Jiang F, Guo J, Cheng C, Gu B. Human infection caused by *Streptococcus suis* serotype 2 in China: report of two cases and epidemic distribution based on sequence type. BMC Infect Dis. 2020 Mar 14;20(1):223. doi: 10.1186/s12879-020-4943-x.



Lethal *Streptococcus suis* septicemia seen in a male patient aged 30's, who daily handled pigs and pork. In the peripheral blood, a few free diplococci are observed. May-Giemsa-1



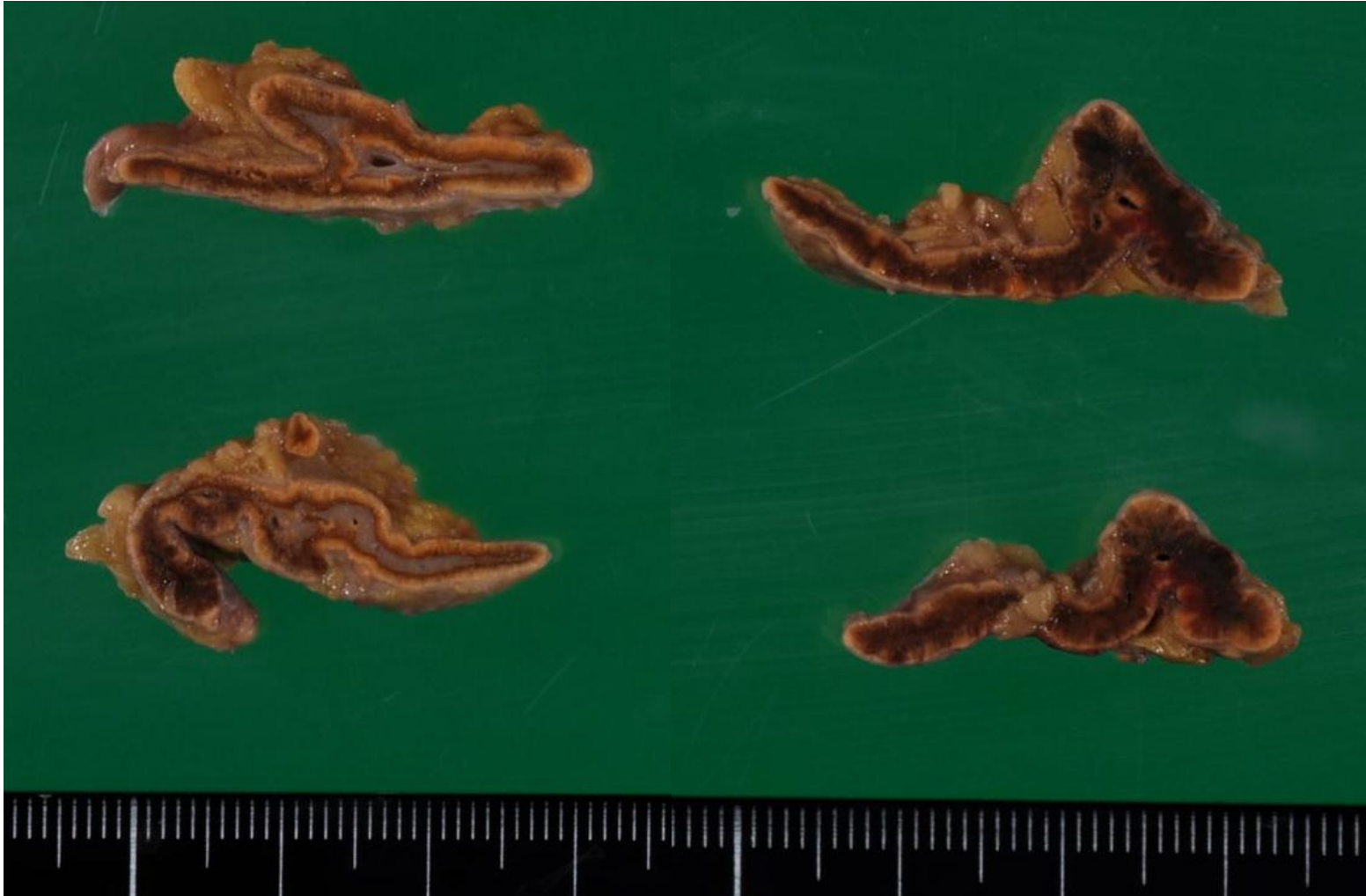
Lethal *Streptococcus suis* septicemia seen in a male patient aged 30's, who daily handled pigs and pork. In the peripheral blood, a few free diplococci are observed. May-Giemsa-2



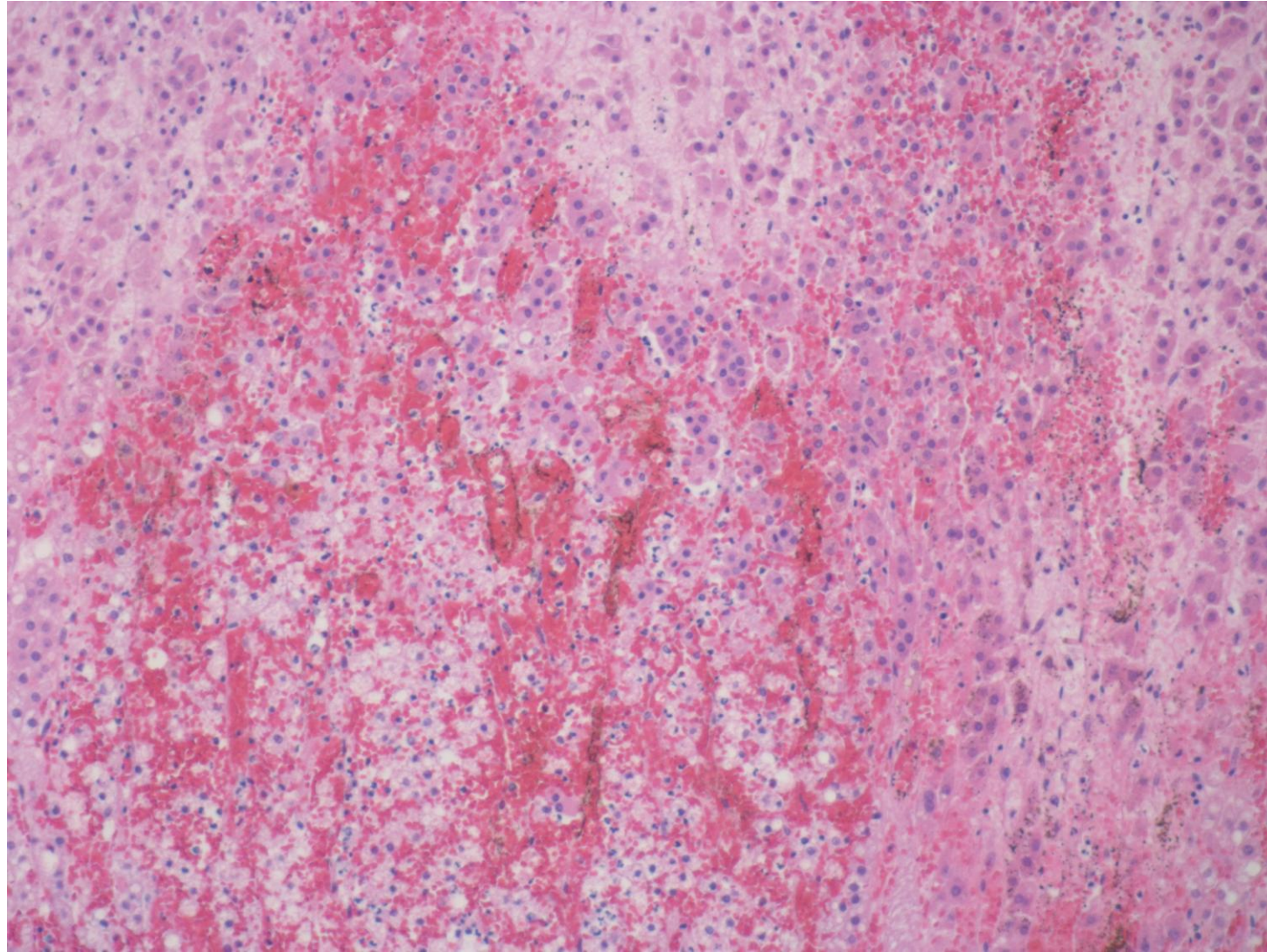
On a culture plate with sheep red cells, *S. suis* shows alpha-hemolysis. The coccal capsule belonged to serum type 2.



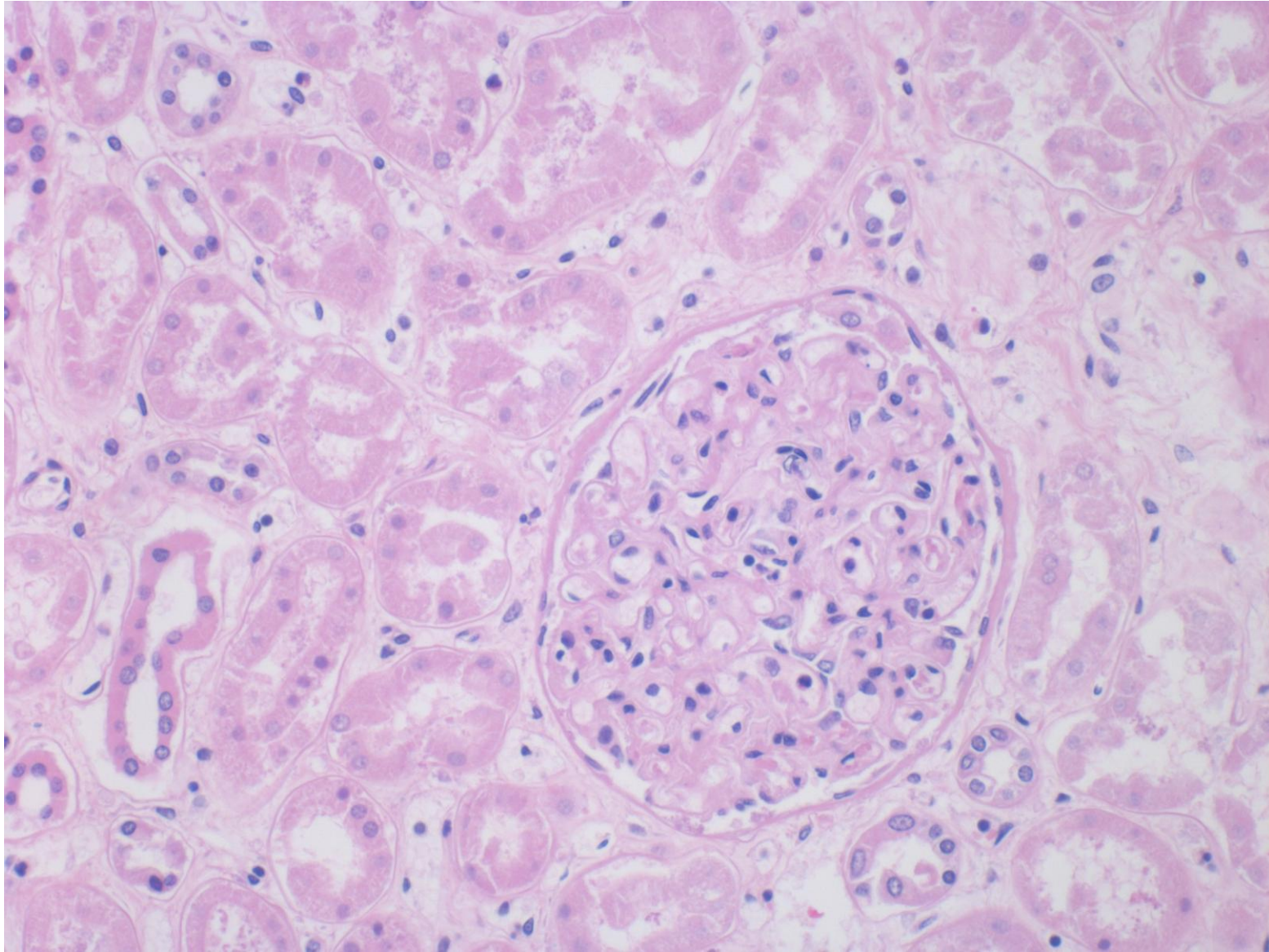
At autopsy, marked congestion was noted in the lung, as a part of multiorgan failure.



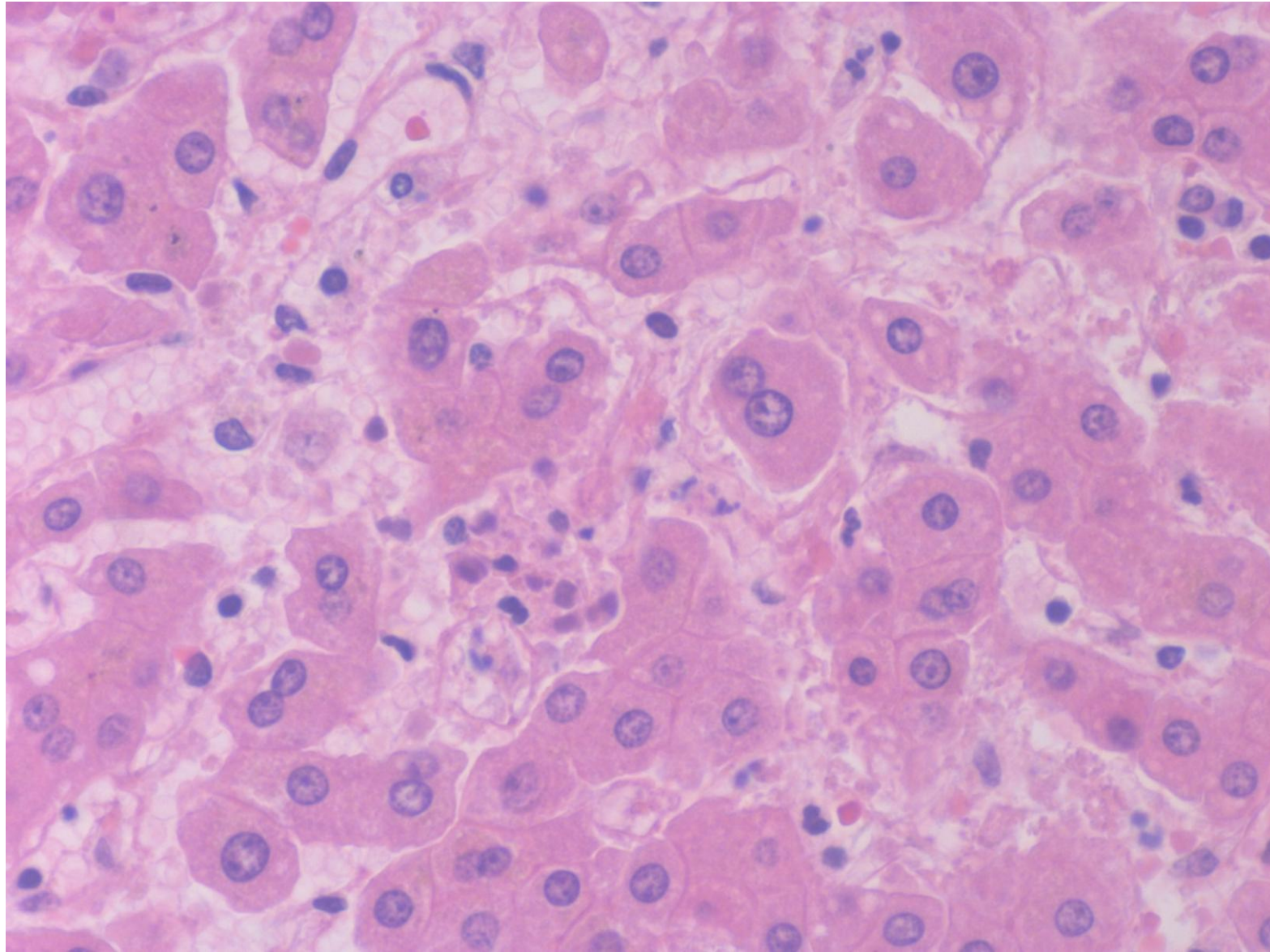
At autopsy, the adrenals show acute hemorrhage, as a manifestation of Waterhouse-Friderichsen syndrome (fulminant septicemia).



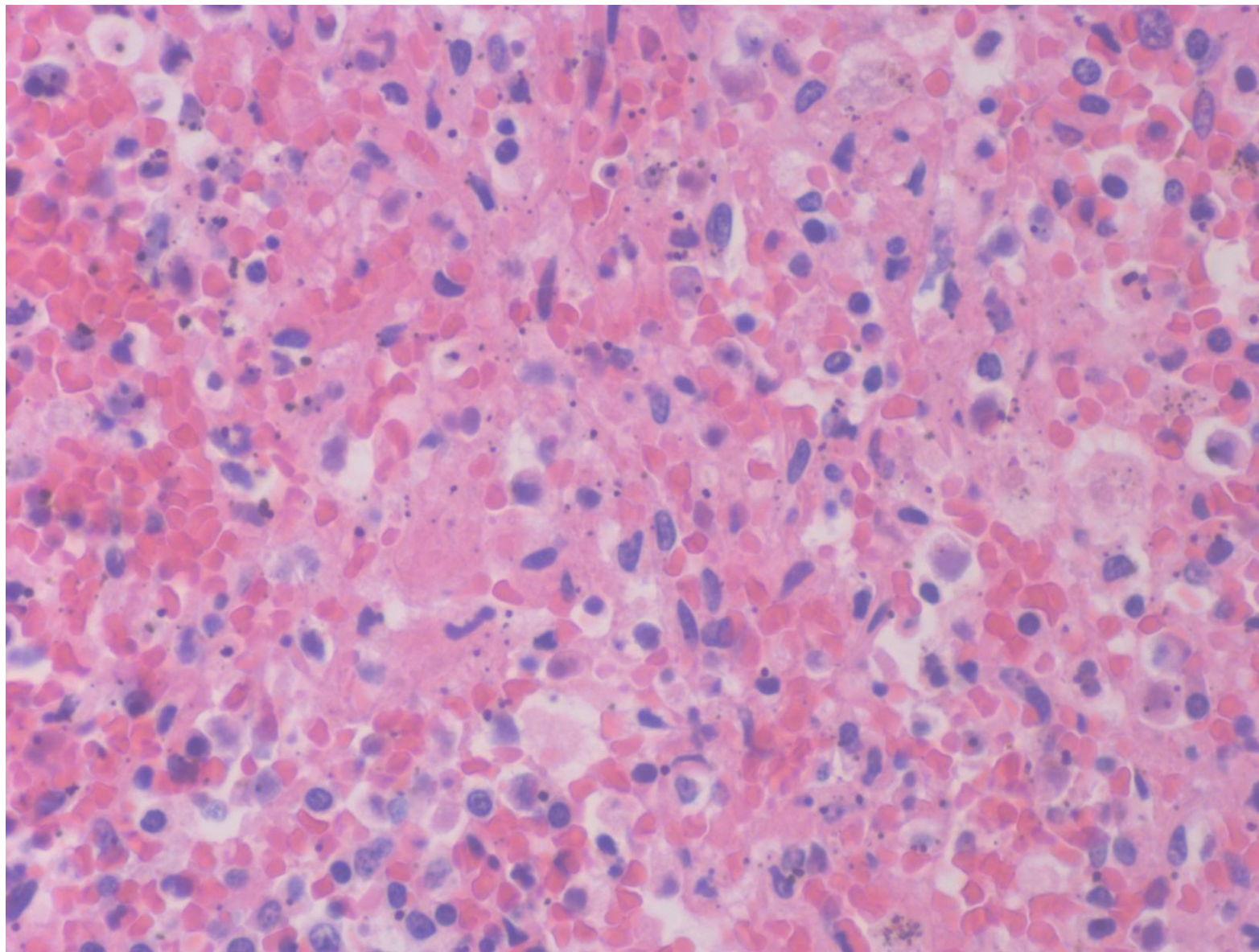
At autopsy, acute hemorrhage in the adrenal is microscopically shown. Disseminated intravascular coagulopathy is associated. H&E



At autopsy, the kidney microscopically shows features of acute tubular necrosis. Stromal edema is associated. H&E



At autopsy, the liver microscopically shows activation of Kupffer cells. Hemophagocytosis is associated, representing hypercytokinemia,



At autopsy, the spleen microscopically shows activation of macrophages in the red pulp. Hemophagocytosis is associated, representing hypercytokinemia,