R. Orozco-Florian and A. Trillo, Department of Pathology, Dalhousie University and Victoria General Hospital, Halifax, Nova Scotia, B3H 2Y9

Intraoperative identification of Pneumocystis carinii involves the use of special stains that may require from one to several hours. Although identification of Pneumocystis carinii in tissue sections with hematoxylin-eosin (H&E) has not proven satisfactory, the organisms are readily stained with H&E smears. A method using touch preparations and staining with H&E is described. The preparation takes a few minutes and identification of the organisms can be achieved within five to ten minutes. The specimen, is bisected and a touch preparation obtained. The slide is immediatedly fixed with cytosol, dried for a few seconds, and stained with H&E. The slides are examined with either high dry or oil immersion. The material on the slides consists of foamy amorphous clusters of organisms, macrophages, epithelial cells and polymorphoclear cells. Cysts and sporozoites are identifiable outside cells and within macrophages or epithelial cells. The results correlate with those of tissue sections using special stains and thus provide a rapid and reliable method for identification of these organisms. Advantages of this method over the special stain methods include rapidity, simplicity, low cost, and easy interpretability. Adequate precautions are recommended during the handling of this material.