

**The complementary role of Indium-111 labeled leukocyte imaging, ultrasonography and computed tomography in the evaluation of postoperative infection or abscess**

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We report our experiences with the combined use of indium-111 labeled leukocyte imaging (In-111 WBC scan.), computed tomography (CT) and ultrasonography (US) for evaluation of suspected postoperative infection or abscess, and discuss the complementary roles of these modalities. Postoperative abscesses or infections were diagnosed in 9 of 20 patients. All patients were correctly diagnosed by In-111 WBC imaging and 4 patients could not be diagnosed by US because of bowel gas. One false-positive CT examination and another artifact on CT images due to respiratory movements were obtained. The three modalities were found to be complementary: CT and US were efficient imaging methods for diagnosis and treatment of abscess. In-111 WBC imaging could estimate the activity of inflammation.

**Key words:** Postoperative infection or abscess, US, CT, In-111 labeled leukocyte imaging