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BASIC INVESTIGATION OF VENOUS THROMBUS DETECTION IN RATS WITH Ga-67 FIBRINOGEN DAS-DFO.

DAS-Dro.

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Human fibrinogen labeled with Ga-67 was used to detect venous thrombus (VT) in rats. VT were induced by sillicon catheter inserted into vena cava superior of the rat. Ga-67 fibrinogen-DAS-DFO (Ga-67 fibrinogen) were injected in 42 of control rats and 78 of rats with VT. Organ distribution of Ga-67 fibrinogen were evaluated by scintigraphy, autoradiography and organ samplings. The activity of Ga-67 fibrinogen in VT was ranging from 1.7 to 118.5 times of the blood, resulting in obtaining clear scintigram for VT. Autoradiograms showed high concentration of Ga-67 fibrinogen in VT surrounding the inserted catheter. Liver uptake in rats with VT were significantly higher than the control rats(p<0.001)

Thus, Ga-67 fibrinogen may be used as thrombus-imaging agent and measurments of liver uptake may become an useful indicator for thrombus detection.