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The effect of $FeCl_3$ on the accumulation of gallium-67 into inflammatory and normal tissues

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The effect of $FeCl_3$ on the uptake of ^{67}Ga by inflammatory and normal tissues was studied to clarify the role of transferrin in ^{67}Ga uptake by inflammatory tissue. The administration of $FeCl_3$ 5 min before the injection of ^{67}Ga decreased the uptake of ^{67}Ga by liver and spleen, but had little effect on the uptake of ^{67}Ga by the inflammatory tissue. These results suggest that ^{67}Ga is taken up by normal tissues in a transferrin-bound form but in an unbound form by inflammatory tissue. On the other hand, when $FeCl_3$ was simultaneously injected with ^{67}Ga, the uptake of ^{67}Ga by liver and spleen was markedly increased but the uptake by inflammatory tissue was decreased.

Key words: ^{67}Ga uptake, Inflammation, $FeCl_3$