

## Experimental Study about Diagnosis of Hepatoma Using Iodinated anti $\alpha$ -Fetoprotein Antibody.

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There are many works trying to concentrate the radioiodinated antibody to the tumor. It is known that the hepatoma cells secrete  $\alpha$ -fetoprotein.

We have examined whether iodinated anti rat  $\alpha$ -fetoprotein antibody concentrate to the rat using hepatoma AH66C4. Anti  $\alpha$ -fetoprotein antibody was prepared from the horse immune sera.

Serum was salted out by 33%  $(\text{NH}_4)_2\text{SO}_4$  and dialyged against tris phosphate buffer for 24 hours and IgG fraction was seperated filtering through DEAE cellulose collum.

The purified IgG was labelled with carrier free  $^{125}\text{I}$  and  $^{131}\text{I}$  by chloramin T method.

Tumor cells were incubated with  $^{125}\text{I}$ -Ab at  $37^\circ\text{C}$  for 1 hour and then microradioautographs were prepared by standard technique.

The  $^{131}\text{I}$ -Ab was injected to tumor-bearing rat intravenously and scintiphotographs wew obtained by the aid of scintillation camera after 24 hours, 48 hours and 72 hours.

Microradioautograph showed remarkable concentration of  $^{125}\text{I}$ -Ab around the tumor cells. But any radioactivity was detected relating the tumor by scintiphotography.