

seen within normal range. This fact showed that the excretion of  $^{131}\text{I}$ -Rose Bengal into the gall bladder was small in quantity.

In the case of cholangiolitic hepatitis, the half life time of the third phase was 228

minutes and a distinct appearance in the gall bladder showed up 40 minutes after the injection both on the graphic pattern and on the C.R.T. image.

## Efficacy of Diagnostic Application of Scintillation Camera and $^{131}\text{I}$ Rose-Bengal in Biliary Dyskinesia

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Dynamic observation of various diseases of the biliary tract was made by reviewing the scintigraphic tracings of  $^{131}\text{I}$ -Rose Bengal over time with a scintillation camera and 1600 channel analyzer. At the same time, gall bladder function was studied by oral administration of 2 egg yolks as a gall bladder constrictor 90 minutes after the injection of  $^{131}\text{I}$ -Rose Bengal, and quantitative determination of changes in radioactivity in the gall bladder with time (at 3 minute intervals) was made by observing the  $^{131}\text{I}$ -Rose Bengal excretion curve using the 1600 channel analyzer. Review was made of the diagnostic application of these procedures in biliary dyskinesia.

### Subjects:

The subjects tested were individuals diagnosed as normal, chronic cholecystitis, cholelithiasis and biliary dyskinesia by cholecystogram. Case with biliary dyskinesia were further classified into those with and without symptoms.

### Results:

1) No significant difference in the appearance time of radioactivity in the gall bladder was noted among the cases with various biliary tract diseases.

2) Appearance of radioactivity was noted in the intestines before the oral administration of eggs in the normal, chronic cholecystitis, cholelithiasis and biliary dyskinesia cases without symptoms, but in the biliary dyskinesia cases with symptoms, there was no excretion of radioactivity before the administration of eggs with the exception of 1 case.

3) Excretion pattern after egg administration showed that there was no case with B type (delayed type) among the normal cases, while there were 11/24 (45.8%) in the biliary dyskinesia cases (demonstrated by cholecystogram), but differential diagnosis between the other biliary tract diseases could not be established.