curves and ΔMTT between each compartment stated above, that is, ΔMTT_{RV-LA}, ΔMTT_{RV-LA}, ΔMTT_{PA-LA}, ΔMTT_{PA-LV}, was calculated. As the result, PPT was found to be close to MTT_{PA-LV} and it was nearly equal in both before mentioned positions as to PPT. Consequently, "PBV" calculated from the pulmonary trunk to the mitral valve, can be expressed from RCG with the following simple formula.

"RBV"$\fallingdotseq PPT_{RCG} \times CO$ (Cardiac Output), since mean value of PTV (volume of pulmonary trunk) was approximately equal to 1/2LVV (half of left ventricular volume). "PBV" was obtained by RCG with this formula in 8 patients without cardiac diseases, 8 patients with mitral stenosis, 10 patients with ischemic heart disease and 7 patients with hypertension. "PBV" tended to be higher in patients with cardiac diseases, particularly with mitral stenosis, than in patients without cardiac diseases.

Cardiac Output Estimation Using Cardiac RI Angiography

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The cardiac output calculation by RISA can be obtained by multiplying the blood volume (ml.) by the ratio of 60 (cm. per min. for paper speed) times height in equilibrium to the area (cm^2.) under curve in the radiocardiogram.

This ratio is theoretically equal to the ratio of 120 (frame per min.) times equilibrium count number to the total count number of the area under curve in the ROI map.

According to this view, the new ratios were obtained from the radiocardiograms of right atrium, right ventricle, left atrium, and left ventricle in the figures of RI angiography.

The ratios drop in proportion to cardiac output reduction, but those are larger about 40% than the RISA ratio.