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KEY WORD : CINE FLUOROGRAPHY / CARDIAC CATHETERIZATION

SONGCHAI CHAIYAKIT : A COMPARATIVE STUDY OF 2 DIFFERENT BLACK AND WHITE NEGATIVE FILMS IN CINEFLUOROGRAPHY FOR CARDIAC CATHETERIZATION. THESIS ADVISOR : SAPHA LUMPHANECHAKARN, M.D., CERT IN ARTS AS APPLIED TO MEDICINE (JOHNS HOPKINS),, NARONG SURINWONG M. Sc. (MEDICAL ARTS & COMMUNICATIONN),, NUCHAREE PUTRASRENI M. Sc. ( MEDICAL ARTS & COMMUNICATION ), 94 p. ISBN 974 - 589 - 645 - 4

The objective of this study is to compare the quality of two cinefluorography films for cardiac angiographic catheterization in the condition of same fluoroscopic machine and same developer processing. The controlling conditions are that the body weights of studied subjects must be in the same range or comparable, the positions of radio opaque injections must be the same and the standard of films before developer processing must be in the same characteristic curve. The results of study are used to determine the different quality of films as a criteria to select the films for cardiac catheterization with the best efficacy and for the best accuracy in the diagnosis of patients. In the hospitals which offer the treatment of cardiovascular diseases, there are two kinds of films which are used for diagnosis : VARI CATH (Vari - x) film , roll A, C and KODAK C.F.L. film , roll B, D. The positions of radio - opaque injection for cardiac catheterization are : roll A, B films are used for the position of coronary artery angiography and roll C, D films are used for the position of pulmonary artery angiography.

We evaluated the quality of two kinds of cinefluorography films from 30 samples of medical doctors, nurses, radiography technicians and medical technicians who worked in the cardiac catheterization units at Siriraj hospital, Ramathibodi hospital, Central Chest Hospital and Queen Sirikit National Institute of Child Health.

The statistical analysis used in this study is non - parametric statistical tests : the Friedman Two - Way Analysis of Variance by Ranks method and the Mann - Whitney U Test method. The results of the study show that there was a statistically significant difference ( $p < 0.05$ ) between the two cinefluorography films. Kodak C.F.L. film is rated at satisfaction level very much , and VARI CATH (Vari - x) film is rated at medium level of satisfaction when used under standard conditions. The explanation of difference might be external factors of recording procedure and developer processing procedure.