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NAIVE HBSAG POSITIVE AND THAI PILOT SELECTION, STUDY OF RTAF POPULATION MODEL

NAIVE HBSAG POSITIVE ET SÉLECTION PILOTE THAÏ, ÉTUDE DU MODÈLE DE POPULATION DE LA ROYAL THAI AIR FORCE.

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Introduction: In Thailand, pilot selection policy for positive HBsAg is still inconclusive; some AMEs consider this to be disqualified. There is no adequate optimal research information or support evidence available to make decision of Issuance. The Civil Aviation Authority of Thailand have medical assessment guidelines for viral hepatitis as infectious hepatitis—the recommendation is that infectious hepatitis is disqualifying, and assessment after full recovery may be considered acceptable.

HBsAg in Thailand is quite common with pooled prevalence of 5.1% in 2015. Interestingly, national policy or health promotion programs to incorporate routine screening of HBV in Thailand to prevent CHB complications is still not widespread--only in 9% of the total population. Even in Royal Thai Air Force (RTAF) population, annual medical checkup has no HBsAg screening. This study is the first study of naive HBsAg in Thai community base with full investigation, in order to provide more information about pilot selection and HBsAg to support aeromedical management in this group of population.

Method: All RTAF personnel having an annual medical checkup from 1 November 2016 to 1 November 2017 were screened with HBsAg test. All naive positive HBsAg carrier were investigated. Collection of history, epidemiological data, blood test, ultrasonography of liver and fibroscan assessment of hepatic elasticity were all done.

Result: In a total of 15491 RTAF population (11957 male, 3533 female), 471 were HBsAg positive (3.04% of prevalence rate). Advanced asymptomatic hepatocellular carcinoma (HCC) in this screening was positive in 3 cases (prevalence rate of 817 per 100000 persons). Active viral replication with HBeAg was positive in 42 cases. One third of high risk group with active viral replication and active disease should be disqualified.

Discussion: This study is the first population-based screening of naive HBsAg carrier in Thailand. Recommendation for pilot licensing should be considered after a full risk assessment, categorizing into three main groups.