

INCIDENCE AND ASSOCIATED FACTORS OF HBsAg AND ANTI-HCV SEROCONVERSION: A PROSPECTIVE STUDY IN A TRIPLE HBV-, HCV- AND HDV-ENDEMIC AREA IN TAIWAN

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BACKGROUND/AIMS: Tzukuran in southern Taiwan has been reported to be endemic for HBsAg (12.6%), anti-HCV (41.6%) and anti-HDV (15.3% in HBsAg carriers). A follow-up study was conducted seven years after a previous community survey to determine the incidence and associated factors of HBsAg and anti-HCV seroconversion.

METHODS: A total of 2,909 adult residents 45 years of age or older were screened for HBsAg and anti-HCV in 1997, and 1,002 (M/F: 461/541, age: 66.7± 8.6 years) of these patients participated in the follow-up examination in 2005.

RESULTS: The incidence (% per person-year) of HBsAg-positive conversion, anti-HCV-positive conversion (or recent infection), HBsAg-negative conversion (or clearance) and anti-HCV-negative conversion (or reversion) were 0, 1.35 (n=58), 1.58 (n=17) and 0.63 (n=17), respectively. The only significant risk factor for recent HCV infection was household contact. Male sex and old age were significantly associated with HBsAg clearance. No associated factors of anti-HCV reversion was identified. Multiple viral infections failed to demonstrate the association with either HBsAg or anti-HCV clearance. All 17 cases of HBsAg clearance were positive for anti-HBc and 8 cases (47%) were also positive for anti-HBs.

DISCUSSION/CONCLUSIONS: Among the subjects in the endemic area, no new HBsAg carriers were found but some were newly infected with HCV. Subjects with HBsAg or anti-HCV clearance were shown, but multiple viral infections may not be the associated factors.

Keywords: recent HCV infection, HBsAg clearance, anti-HCV reversion.