Title	Central nervous system inflammatory demyelinating disorders in Hong Kong Chinese
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Citation	The 18th Medical Research Conference (MRC 2013); Department of Medicine, The University of Hong Kong, Hong Kong, 12 January 2013. In Hong Kong Medical Journal, 2013, v. 19 n. 1, suppl. 1, p. 31, abstract no. 44
Issued Date	2013
URL	http://hdl.handle.net/10722/181788
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Elevated circulating adipocyte-fatty acid binding protein levels predict incident cardiovascular events in a community-based cohort: a 12-year prospective study

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Introduction: Obesity is closely associated with various cardiovascular diseases (CVD). Adipose tissue inflammation and perturbation of adipokines secretion may contribute to the pathogenesis of CVD. This study aimed to evaluate whether the two most abundant adipokines, adipocyte-fatty acid binding protein (A-FABP) and adiponectin, are independent risk factors predisposing to CVD.

Methods: We investigated prospectively the 12-year development of CVD in relation to the baseline levels of A-FABP and adiponectin in a population-based community cohort, comprising 1847 Chinese subjects recruited from the Hong Kong Cardiovascular Risk Factors Prevalence Study 2 (CRISPS 2) cohort without previous CVD. Baseline serum levels of A-FABP, adiponectin, and C-reactive protein (CRP), an established biomarker predictive of CVD, were measured.

Results: Of the 1847 Chinese subjects, 182 (9.9%) developed CVD during a median follow-up of 9.4 years. The CVD group had more traditional risk factors, higher baseline levels of A-FABP and CRP (both P<0.001), but similar adiponectin levels (P=0.881), compared to the non-CVD group. In Cox regression analysis including both biomarkers, the adjusted hazard ratio for A-FABP and CRP for subjects above the optimal cut-off values were 1.57 (95% confidence interval: 1.14-2.16, P=0.006) and 1.60 (1.12-2.27, P=0.01) respectively, after adjustment for traditional risk factors. Likelihood ratio test showed that elevated levels of either A-FABP (P=0.026) or CRP (P=0.002) could enhance the prediction of incident CVD by traditional risk factors.

Conclusions: Circulating A-FABP level predicts the development of CVD, independent of traditional risk factors, in a community-based cohort. Its clinical use for CVD prediction warrants further validation.

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Central nervous system inflammatory demyelinating disorders in Hong Kong Chinese

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Background: Classical multiple sclerosis (CMS) must be differentiated from neuromyelitis optica (NMO) as treatments are different. Serum aquaporin-4 autoantibodies (AQP4 Ab) are specific for NMO spectrum disorders (NMOSD). We aimed to study the diagnoses of CNS inflammatory demyelinating disorder (IDD) patients presenting to a hospital over 29 years.

Methods: Chinese patients presenting with CNS IDD to our hospital from 1981 to 2009 were studied. Patients referred from other centres were excluded. Since 2008, patients had yearly magnetic resonance imaging (MRI) brain and cord for 3 years even without relapse, and 3 or more yearly sera for serial AQP4 Ab assay by cell-based immunofluorescence assays. CMS was diagnosed by revised McDonald criteria (2005), NMO by revised Wingerchuk's criteria (2006). Other NMOSD was diagnosed in restricted forms of NMO seropositive for AQP4 Ab.

Results: Among a total of 181 Chinese patients studied, 61 (33.7%) had CMS (45 female, mean onset age 29.8 years), 40 (22.1%) NMOSD—24 NMO (all relapsing, 21 female, mean onset age 43.1 years, 19 [79.2%] AQP4 Ab seropositive, 20 [83.3%] with LETM), 16 other NMOSD (14 female, 8 recurrent AM with LETM, 3 recurrent ON without AM, 2 single LETM attack, 1 recurrent brainstem encephalitis , 1 AM and brainstem encephalitis, 1 single ON attack), 30 (16.6%) single AM attack, 20 (11.0%) single ON attack, 8 (4.4%) relapsing myelitis (4 with and 4 without LETM), 8 (4.4%) ADEM, 7 (3.9%) relapsing ON, 4 (2.2%) OSMS, 3 (1.7%) signal brainstem encephalitis attack. One of 61 (1.6%) CMS patients had LETM clinically. He responded well to beta-interferon. Two (5%) NMOSD patients had MRI brain at presentation fulfilling Barkhof's criteria, both had LETM and AQP4 Ab. All seropositive patients had AQP4 Ab detected in first assay. None turned seronegative.

Conclusions: CMS and NMOSD are the most common relapsing CNS IDD in Hong Kong Chinese at a ratio of 3:2. At least 22.1% patients had NMOSD.