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C-Reactive Protein Is Associated with Silent Brain Infarction in General Population

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High sensitive C-reactive protein (CRP) has shown a strong association with increased risks of clinical vascular diseases. However, the association with silent brain infarction (SBI) is unclear, especially in the population with low CRP levels. We explore to observe the association of CRP and SBI in general population. Total of 74 cases and 296 controls included from 2 studies in community. Case is those had no history of stroke but had ischemic lesion in brain MRI. Four randomly sampled controls matched by age, gender and study population, from those subjects without SBI. All persons accessed the CRP levels. The subjects with SBI, than without SBI, had significantly more hypertensive, diabetics, hyperlipidemia, history of cardio-vascular disease, and higher proportions of above median CRP (≥ 0.133 mg/dL). Of raised CRP level to SBI risk, the age- & sex-adjusted odd ratio (OR) is 1.87 ($p=0.0237$) and multivariate OR is 1.71 ($p=0.0569$). Elevated CRP level had most markedly progression additive effects with higher Framingham stroke scores (FSS, ≥ 10) and serious plaque score (PS, ≥ 4). The persons with above median CRP levels had an additional SBI risk in those with raised FSS (OR, p : 4.06, 0.0014) or PS (3.89, 0.0004), whereas, in those without raised FSS or PS risk, those with below median CRP level did not have an increased SBI risk.

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Correlates and Accuracy of Osteoporosis Screening among Female Community Residents

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Objectives: To explore the correlates of osteoporosis screening behavior among female community residents and to examine the accuracy of osteoporosis screening. **Method:** A telephone survey was conducted using nation-wide representative samples of female community residents aged 25 and older. Data were collected using computer-assisted telephone interview systems by stratified random sampling according to geographic areas. This survey ($N=1,074$) was conducted weekdays from September 24 to 30, 2008. A logistic regression was used to explore association between demographic variables and osteoporosis screening behavior.

Results: A total of 29.2% subjects underwent quantitative ultrasound (QUS) and 13.4% underwent

dual-energy X-ray absorptiometry (DXA) in the past year, with abnormality rates of 35.3% and 32.7%, respectively. The false positive rate of QUS based on DXA outcome was 26.1%; however, only 28.8% of subjects with osteoporosis diagnosed by QUS further undertook DXA. Multiple logistic regression analyses revealed that age 65 or above (OR=3.83, 95%CI=2.03-7.23), age 51 to 64 (OR=2.31, 95%CI=1.55-3.45), northern residential area (OR=3.38, 95%CI=1.27-9.00), central residential area (OR=3.74, 95%CI=1.35-10.32), southern residential area (OR=3.75, 95%CI=1.39-10.07), those having a full time job (OR=1.46, 95%CI=1.03-2.06), were more likely to undergo QUS compared to their counterparts, after controlling for subjects' level of education and household income.

Conclusions: Age, residential area, and working status were significantly correlated with osteoporosis screening behavior. We therefore not only call for increased awareness on osteoporosis screening but also recommend further investigation once diagnosed with osteoporosis by QUS.

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Caregiver Burden among Caregivers for Children with Rare Diseases

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Objective: The aim of this study was to explore the level of caregiver burden for rare disease children.

Method: There were 695 rare disease children aged 7-15 registered as members of the Taiwan Foundation for Rare Disorders. An anonymous questionnaire for the caregiver was mailed to these members' family. A total of 344 subjects were recruited in this survey with the response rate of 49.5%. A total of 231 subjects meet the criteria of government announced rare diseases and were included in the data analyses. The Chinese version of Caregiver Burden Inventory (CCBI) and Zarit's burden Interview-Chinese version (CZBI) were used as an instrument to measure the level of caregiver burden.

Results: The main caregiver of these rare disease children was the mother (80.5%), the father (13.4%) and others (6.1%). Roughly 47.2% of the children were diagnosed as having rare disease before two years of age, and 67.1% of their diseases were reported under control during the survey period. The mean score of the CCBI was 43.53 ± 18.94 and it was lower than that of patients with dementia from other studies. Besides, the mean score of the CZBI was 36.04 ± 15.94 and it was higher than that of patients with dementia from other studies. **Conclusion:** The difference of mean CCBI/CZBI score of patients in this study compared to other studies raises the importance of targeted and tailored educational counseling for this high-risk population.