Serum total bilirubin level, prevalent stroke, and stroke outcomes: National Health and Nutrition Examination Survey.

Online Appendix:

The physical function section (PFQ) of the home interview examination provides self-reported data on functional limitations caused by long-term physical, mental, and emotional problems or illness[1]. It can be used to assess an individual's level of disability. Adult participants (≥ 20 years of age) were asked if they had a 'health problem', defined as any long-term physical, mental or emotional problem or illness (not including pregnancy), that limited ability to work or caused difficulty remembering. If the answer to each of these was 'no', participants were asked if they were limited in any way in any activity because of a physical, mental or emotional problem. If the answer to any of these was 'yes', or if the answer to each of these was 'no' and the subject was ≥ 60 years of age, the subject was then asked if a 'health problem' (defined as above) causing difficulty in any of the following specific activities: managing money; walking a quarter mile; walking up ten steps; stooping, crouching, or kneeling; lifting or carrying a 10 pound object; house chores; preparing meals; walking between rooms on level floor; sitting for long periods; reaching up over head; grasping or handling small objects; going out to

things like shopping, movies, or sporting events; attending social events; standing up from an armless chair; getting in or out of bed; using fork, a knife, or drinking from a cup; dressing self; standing for long periods; doing things at home to relax at home or for leisure. If participants indicated difficulty in response to any of these questions, they were then asked to identify the health problem(s) causing difficulty. A list of health conditions was provided to choose from, one of which was stroke. If a subject reported stroke as the source of the health problem, we defined that subject as having an adverse stroke outcome.

References

1. National Center for Health Statistics. *National Health and Nutrition Examination Survey 03-04. SP Questionnaire Component: Physical Functioning Questionnaire Data*. Hyattsville, MD: National Center for Health Statistics; 2005. (http://www.cdc.gov/nchs/data/nhanes/nhanes_03_04/pfq_c.pdf). (Accessed February 15, 2007).

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Clinical significance:

1. Bilirubin is now recognized to have anti-inflammatory, antioxidant, and cytoprotectant properties.

2. Experimental data suggest that bilirubin may protect from stroke.

3. Individuals with higher bilirubin levels were less likely to have suffered a stroke.

4. Among those with a history of stroke, those with higher bilirubin levels were less likely to have suffered an adverse stroke outcome.