**Supplementary Table 1.** Associations between serum total cholesterol (TC) levels assessed at single time points and suicide death

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| One year before suicide | | | Two years before suicide | | | Three years before suicide | | |
| Tertiles a (mg/dL) | No. of ca./co. | Adjusted OR  (95% CI) b | Tertiles a (mg/dL) | No. of ca./co. | Adjusted OR  (95% CI) b | Tertiles a (mg/dL) | No. of ca./co. | Adjusted OR  (95% CI)b |
| Highest (≥ 215) | 6/58 | 1.00 | Highest (≥ 216) | 8/59 | 1.00 | Highest (≥ 217) | 6/56 | 1.00 |
| Middle (185 -< 215) | 9/56 | 1.69 (0.54, 5.31) | Middle (186 -< 216) | 10/56 | 1.77 (0.59, 5.25) | Middle (186 -< 217) | 10/57 | 1.90 (0.62, 5.82) |
| Lowest (< 185) | 19/56 | **3.69 (1.31, 10.38)** | Lowest (< 186) | 16/55 | 2.76 (0.99, 7.67) | Lowest (< 186) | 18/57 | **5.11 (1.54, 16.94)** |
| *p* for trendc |  | **0.009** |  |  | **0.049** |  |  | **0.007** |
| Predefined  categories(mg/dL) | No. of ca./co. | Adjusted OR  (95% CI) b | Predefined categories(mg/dL) | No. of ca./co. | Adjusted OR  (95% CI) b | Predefined categories(mg/dL) | No. of ca./co. | Adjusted OR  (95% CI) b |
| ≥ 220 | 4/48 | 1.00 | ≥ 220 | 8/53 | 1.00 | ≥ 220 | 6/51 | 1.00 |
| 200 -< 220 | 7/38 | 2.29 (0.61, 8.63) | 200 -< 220 | 7/40 | 1.41 (0.43, 4.59) | 200 -< 220 | 6/41 | 1.41 (0.40, 4.96) |
| 180 -< 200 | 9/40 | 3.28 (0.88, 12.30) | 180 -< 200 | 11/28 | 2.82 (0.98, 8.13) | 180 -< 200 | 10/35 | 2.88 (0.89, 9.31) |
| < 180 | 14/44 | **4.36 (1.26, 15.09)** | < 180 | 8/49 | 1.21 (0.36, 4.03) | < 180 | 12/43 | 3.35 (0.97, 11.51) |
| *p* for trend c |  | **0.02** |  |  | 0.43 |  |  | **0.03** |
| Decrement of 10mg/dL (continuous) | | **1.17 (1.02, 1.33)** |  |  | 1.09 (0.95, 1.25) |  |  | **1.15 (1.00, 1.33)** |

OR, odds ratio; CI, confidence interval.

a Tertiles were based on the distribution of TC levels among controls at each year.

b Adjusted for smoking (current smoker or not), lipid-lowering treatment (yes or no), diabetes (yes or no) and hypertension (yes or no).

**Supplementary Table 2.** Associations between 3-year average serum total cholesterol (TC) levels and the risk of suicide death after excluding cases and controls under lipid-lowering treatment

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3-year average levels (mg/dL) |  | No. of cases/  controls | Unadjusted OR (95% CI) | Adjusted OR (95% CI) b |
| Tertiles  (range) a | Highest (≥ 214) | 6/58 | 1.00 | 1.00 |
| Middle (184 -< 214) | 11/58 | 2.12 (0.73, 6.14) | 2.33 (0.77, 7.05) |
| Lowest (< 184) | 21/57 | **5.30 (1.79, 15.65)** | **5.78 (1.85, 18.00)** |
| *p* for trend c |  | **0.002** | **0.002** |
| Predefined categories | ≥ 220 | 5/45 | 1.00 | 1.00 |
| 200 -< 220 | 7/38 | 1.70 (0.49, 5.95) | 1.88 (0.50, 7.04) |
| 180 -< 200 | 11/40 | 2.71 (0.86, 8.51) | 3.11 (0.94, 10.27) |
| < 180 | 15/49 | **3.41 (1.08, 10.81)** | **3.76 (1.11, 12.75)** |
| *p* for trend c |  | **0.02** | **0.02** |
| Decrement of 10 mg/dL (continuous) | |  | **1.18 (1.02, 1.36)** | **1.19 (1.02, 1.39)** |

Abbreviations: OR, odds ratio; CI, confidence interval.

a Tertiles were based on the distribution of TC levels among controls.

b Adjusted for smoking (current smoker or not), diabetes (yes or no) and hypertension (yes or no).

c Trend association was assessed by assigning ordinal numbers to each tertile and treating this variable as a continuous variable.