

Levels of As, Cd, Pb and Hg Found in the Hair from People Living in Altamira, Pará, Brazil: Environmental Implications in the Belo Monte Area

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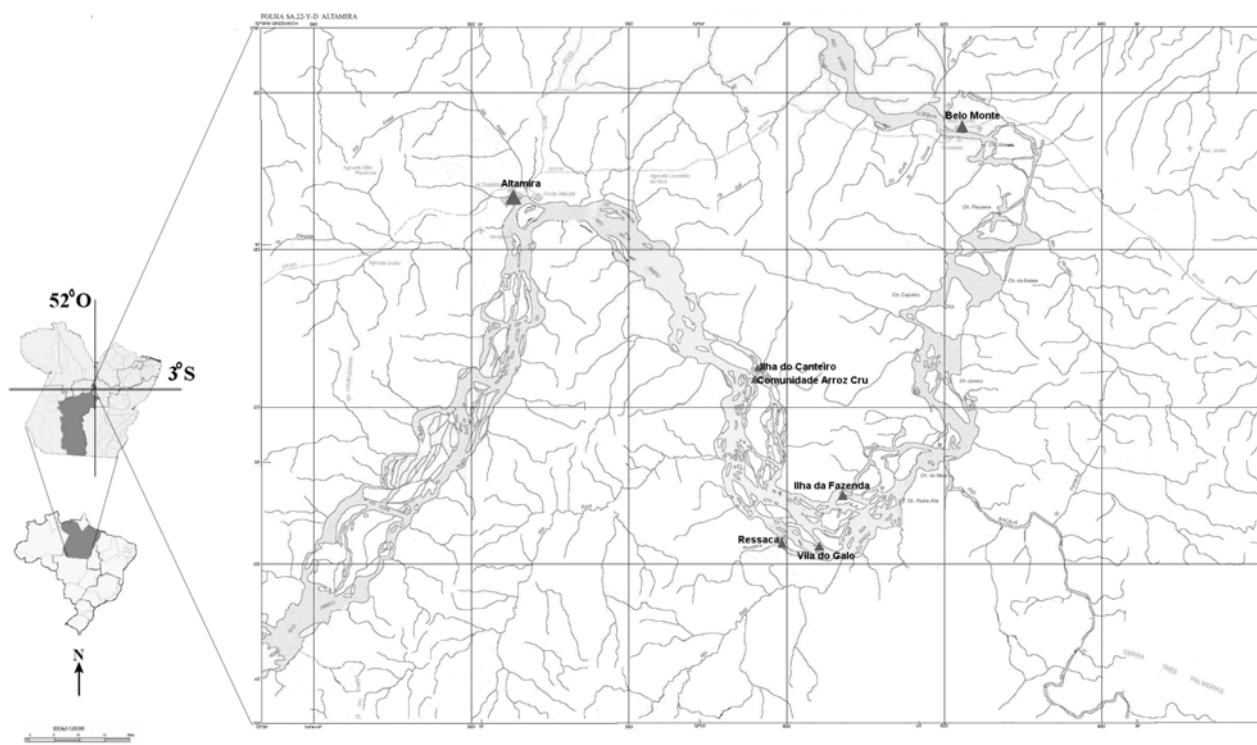


Figure S1. Map illustrative showing the study area (at Altamira city $02^{\circ} 34' 45''$ S and $51^{\circ} 57' 15''$ W Gr) leaf SB.22-Y-D, PA.

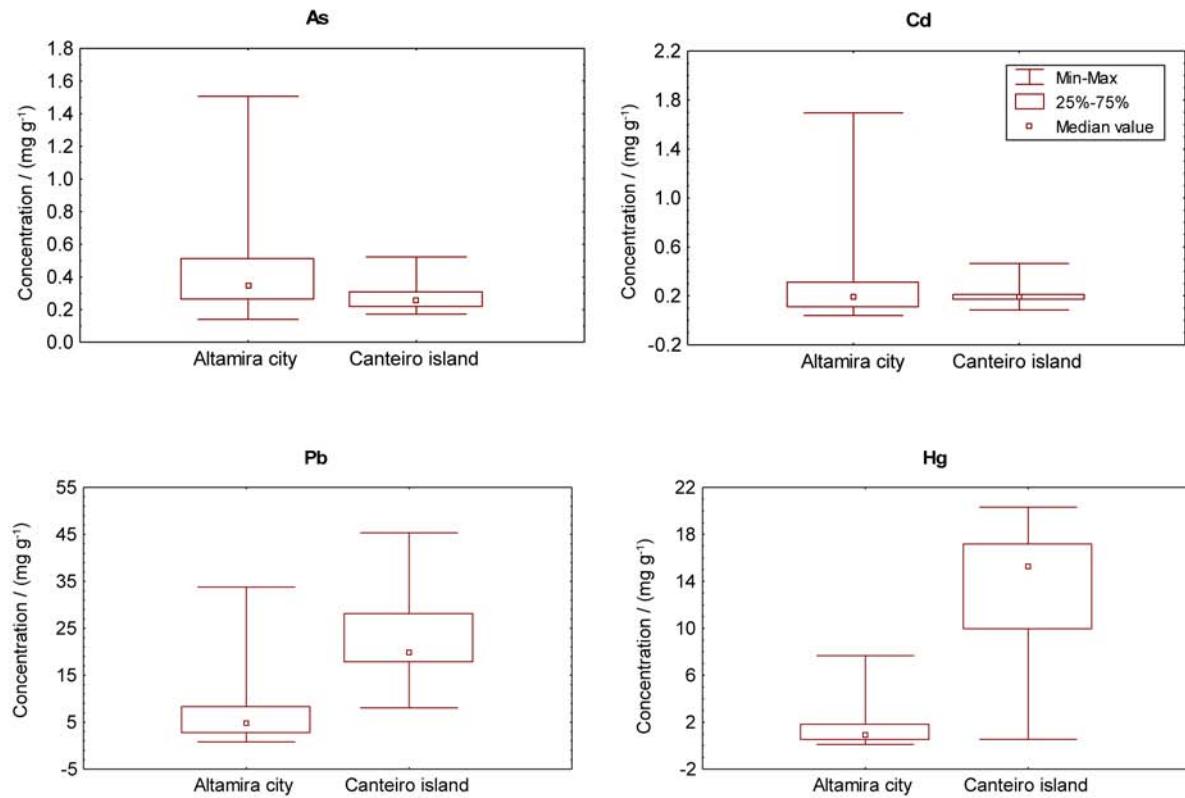


Figure S2. Box-plots showing distribution of concentrations of As, Cd, Pb and Hg ($\mu\text{g g}^{-1}$) in hair samples from resident population in Altamira city and Canteiro island.

Table S1. Matrix correlation for concentration of elements toxic and age in human hair from district Altamira, $p < 0.05$

| Altamira city (n = 58) | | | | | Canteiro island (n = 8) | | | | | | |
|------------------------|-------|-------|-------|-------|-------------------------|-----|-------|--------|--------|--------|--------|
| | Age | As | Cd | Pb | | Age | As | Cd | Pb | Hg | |
| Age | 1.000 | 0.065 | 0.152 | 0.161 | 0.350 | | 1.000 | 0.505 | 0.404 | 0.751 | -0.742 |
| As | | 1.000 | 0.461 | 0.107 | -0.066 | | 1.000 | 0.692 | 0.286 | 0.107 | |
| Cd | | | 1.000 | 0.103 | 0.103 | | 1.000 | -0.047 | -0.255 | | |
| Pb | | | | 1.000 | 0.096 | | | | 1.000 | -0.758 | |
| Hg | | | | | 1.000 | | | | | 1.000 | |

Table S2. Scores obtained in the principal component in matrices for four elements in hair samples from resident population in Altamira city and Canteiro island

| samples | scores | | samples | scores | |
|---------|--------|--------|---------|--------|--------|
| | PC1 | PC2 | | PC1 | PC2 |
| A1 | -0.822 | -0.617 | A48 | -0.367 | 0.913 |
| A2 | -0.299 | 0.155 | A49 | -0.273 | -0.661 |
| A3 | -0.580 | -0.496 | A51* | 5.296 | -0.154 |
| A4 | -0.795 | -0.397 | A52 | 0.785 | -0.488 |
| A5 | -0.409 | -0.296 | A54 | 1.611 | 1.344 |
| A6 | -0.413 | -0.770 | A55 | 0.035 | -0.385 |
| A8 | -0.161 | -0.420 | A56 | 0.327 | -0.620 |
| A9 | -0.563 | -0.863 | A57 | 0.156 | -0.402 |
| A10 | -0.254 | -0.598 | A59 | -0.889 | -0.652 |
| A11 | 0.074 | -0.793 | A61 | 0.952 | -0.445 |
| A12 | 1.487 | 0.607 | A62 | -0.353 | -0.182 |
| A13 | -0.854 | -0.817 | A63 | -0.035 | -0.340 |
| A15 | 0.020 | -0.400 | A65 | -0.716 | -0.402 |
| A16 | 0.013 | -0.140 | A68 | 0.260 | -0.335 |
| A17 | -0.591 | 0.006 | A70 | -0.515 | 0.257 |
| A18 | 0.199 | -0.121 | A71 | 1.401 | -0.412 |
| A19 | 0.012 | -0.785 | A72 | -0.802 | -0.595 |
| A22 | 2.461 | -0.157 | A73 | -0.588 | -0.526 |
| A23 | 0.363 | -0.789 | A74 | -0.400 | -0.639 |
| A24 | -0.241 | -0.813 | A75 | -0.858 | -0.889 |
| A25 | -0.674 | -0.794 | A76 | -0.502 | -0.419 |
| A26 | 2.454 | -0.414 | A77 | 1.033 | 0.115 |
| A27 | -0.666 | 0.161 | A78 | -0.660 | -0.679 |
| A28 | 0.932 | -0.716 | A79 | -0.888 | -0.388 |
| A30 | 0.005 | -0.033 | A81 | 0.069 | -0.214 |
| A32 | -0.537 | -0.666 | B1 | -0.205 | 2.366 |
| A33 | 0.473 | -0.876 | B3 | -0.749 | 2.409 |
| A34 | -0.774 | -0.754 | B4 | -0.288 | 2.532 |
| A36 | -0.058 | 0.423 | B5 | -0.562 | 2.643 |
| A38 | -0.658 | 0.416 | B6 | -0.451 | 2.544 |
| A43 | -0.490 | -0.383 | B7 | -0.970 | 2.140 |
| A45 | -0.300 | -0.203 | B8 | 0.641 | 3.029 |
| A46 | -0.067 | 0.856 | B9** | 0.220 | 1.020 |

* Sample was considered significant for this model of HCA, PCA and DA;

**Sample outline classified in group B.