Supplementary Figure Legends

Supplementary Figure 1

Change in BP, HR and RR in high-salt DAHL/SS relative to baseline (day -7 to 0) after either A β (n=6) or saline (n=6) infusion (post-infusion data from day 3 to 28). Each data point represents the individual mean value over a given 24-h period, adjusted to the baseline mean value for the same individual.

Supplementary Figure 2

Change in BP, HR and RR in low-salt DAHL/SS relative to baseline (day -7 to 0) after either A β (n=8) or saline (n=7) infusion (post-infusion data from day 3 to 28). Linked scatter plots represent data points for the individual mean value on a given 24-h period, adjusted to the baseline mean value for the same individual.

Supplementary Figure 3

Change in HRV, SBPV and mean BRG in high-salt DAHL/SS relative to baseline (day -7 to 0) after A β (n=5) or saline (n=3) infusion (post-infusion data from day 3 to 28). Linked scatter plots represent data points for the individual mean value on a given 24h period, adjusted to the baseline mean value for the same individual.

Supplementary Figure 4

MBP in high- and low-salt DAHL/SS following A β -/saline-infusion. A paired t-test was used to compare MBP in the final week following infusion (day 22-28 inclusive) relative to pre-infusion baseline. MBP in (A) low-salt DAHL/SS increased after A β infusion (day 22-28 vs. baseline) by 3 ± 3 mmHg (t (7) = 2.948, p = 0.022), but did not change significantly after (B) saline infusion. MBP in the (C) high-salt DAHL/SS increased by 21 ± 11 mmHg (mean ± SD) in the A β group (t (5) = 4.726, p = 0.005), whereas MBP in the (D) saline group increased by 11 ± 8 mmHg (t (5) = 3.635, p = 0.015).

Supplementary Figure 5

 $A\beta_{40}$, ET-1, ECE-1, ECE-2 levels and ACE activity in high- and low-salt DAHL/SS after A β or saline infusion. No significant difference was found in $A\beta_{40}$ level in the high- or low- salt DAHL/SS after 4 weeks' A β infusion in (A) brain tissue homogenates (mean + SD). In (B) plasma samples, $A\beta_{40}$ levels were lower than in brain tissue homogenates and several cases fell below the detection limit of the assay; no significant difference was found in the A β_{40} - compared with saline-infused high- or low-salt DAHL/SS (median + IQR shown as data skewed to left). No significant differences were found in the levels of EDN1, ECE-1 or ECE-2 in brain tissue homogenates. Mean + SD of total (C) EDN1 (pg/ml) (D) ECE-1+ECE-1sv (pg/ml) (E) ECE-2 (ng/ml) are shown, presented as mean results from left and right-brain homogenates combined. ACE activity in high and low salt DAHL/SS in (F) brain tissue homogenates; (G) plasma. No significant difference was found between A β -infused brain tissue homogenates with respect to ACE activity.

Supplementary Figure 6

Example power spectral components and time series data for variability and baroreflex sensitivity analyses. HR and SBP waveforms were analysed by use of Spike2 with the HRV1.s2s script, with a (A) 60-s epoch duration shown. A SPBV power spectrum example (B) is shown for the 60-s period above, with the vertical lines to indicate the low and high edges of the frequency bands analysed (VLF 0-0.26 Hz; LF 0.26-0.76 Hz; HF 0.76-3.3 Hz). An example results table (C) is also shown. Baroreflex sensitivity was analysed by use of Spike2 software running the sBRG.s2s script, reflecting spontaneous fluctuations in BP and pulse interval. (D) a smoothed BP and pulse interval trace is generated, and ramps are marked during which BP rises or falls consistently over several heartbeats. (E) Example plot of a positive ramp (R+), and (F) of a negative ramp (R-) show the blood pressure vs. changes in pulse interval after 3, 4, and 5 heartbeats. The baroreceptor reflex sensitivity was estimated from the linear best fit of this correlation. The threshold for the mean r² statistic for each plot was set to 0.7 and ramps with an r²<0.7 were rejected (yellow).