

Pregnancy impairs baroreflex control of heart rate in rats: role of insulin sensitivity.

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SUPPLEMENTAL TABLES AND FIGURE

Supplemental Table 1: Number of sBRS sequences per hour as a function of the beat delay in rats (n=5) in the pregnant and nonpregnant state.

Non-Pregnant									
Light Phase					Dark Phase				
1 beat	2 beat	3 beat	4 beat	5 beat	1 beat	2 beat	3 beat	4 beat	5 beat
122±21	129±17	129±13	140±15	103±16*	185±35	218±32*	196±24*	173±23*	152±19*
Pregnant									
Light Phase					Dark Phase				
1 beat	2 beat	3 beat	4 beat	5 beat	1 beat	2 beat	3 beat	4 beat	5 beat
51±17	56±19	48±14	52±11	37±10	43±11	74±14*	61±12	35±10	28±9

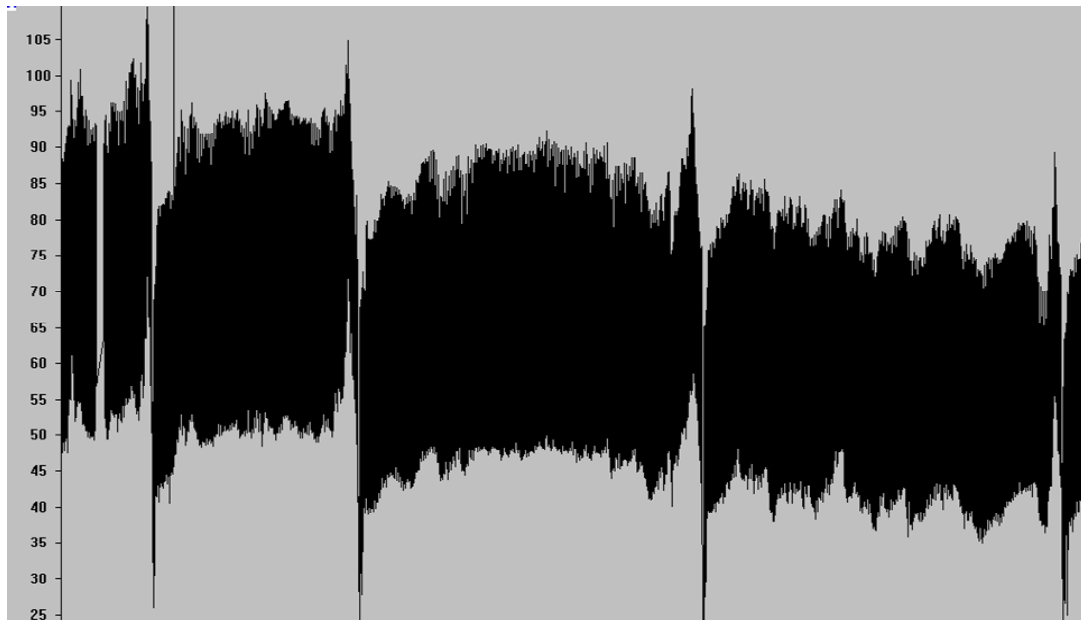
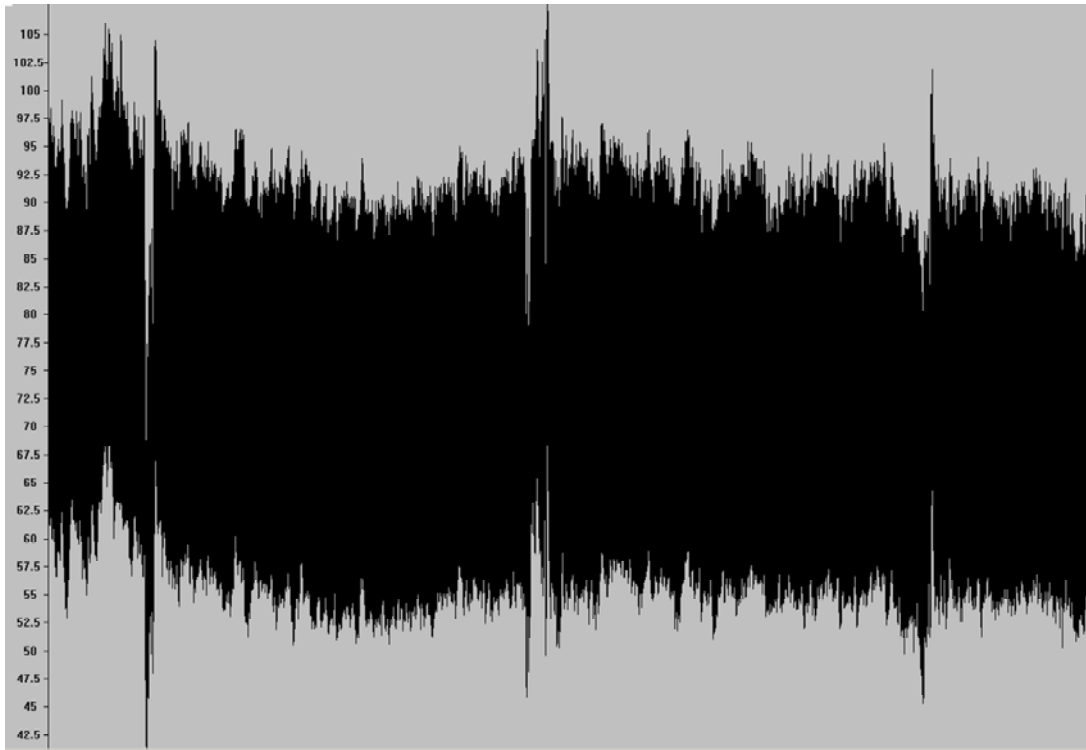
Three-way ANOVA (factors are reproductive state, light-dark, and beat delay) for repeated measures revealed significant ($P < 0.05$) main effects for reproductive state and beat delay. In addition, significant interactions were found between reproductive state and light-dark and between reproductive state and beat delay. Post hoc analysis indicated that the number of sequences identified when rats were pregnant was lower than when the rats were non-pregnant ($P < 0.05$ at all times). While a diurnal variation was present in the non-pregnant state (more sequences at night, $P < 0.05$ at all times), it was absent during pregnancy. During the light phase, the number of sequences detected was not different between beat delays, except for a 5 beat delay in non-pregnant rats, in which the number was lowest ($P < 0.05$). During the dark phase, the highest number of sequences was identified with a 2 or 3 beat delay (similar for pregnant and non-pregnant state). $P < 0.05$, compared to numbers detected at 3-4 other beat delays within time period.

Supplemental Table 2. sBRS (msec/mmHg) as a function of beat delay in rats (n=5) in the pregnant and nonpregnant state.

Non-Pregnant									
Light Phase					Dark Phase				
1 beat	2 beat	3 beat	4 beat	5 beat	1 beat	2 beat	3 beat	4 beat	5 beat
1.68±0.16	1.61±0.12	1.61±0.16	1.63±0.18	1.57±0.17	1.35±0.08	1.33±0.08	1.34±0.08	1.39±0.06	1.38±0.07
Pregnant									
Light Phase					Dark Phase				
1 beat	2 beat	3 beat	4 beat	5 beat	1 beat	2 beat	3 beat	4 beat	5 beat
1.74±0.15	1.63±0.15	1.56±0.15	1.55±0.08	1.63±0.15	1.45±0.23	1.27±0.14	1.24±0.13	1.33±0.16	1.30±0.16

Three-way ANOVA (factors are reproductive state, light-dark, and beat delay) for repeated measures revealed significant ($P < 0.05$) main effects only for beat delay, which probably reflects the tendency for differences between a 1 and 5 beat delay. However, posthoc analysis did not reveal significant differences between beat delays within a time period. No differences between reproductive state or between the light-dark phases of the 24 hr period were detected; no significant interactions were found.

ARTERIAL PRESSURE (mmHg)



Supplemental Figure 1. Arterial pressure in two rats during labor and delivery. Periodic fluctuations in arterial pressure occurred approximately every 4 min in top rat and every 1 min in bottom rat.