

	10-00	12-30	14-00	AUC _{10.00-14.00}
A (fT4)				
Control	18.7 ± 0.7	19.9 ± 1.0	18.1 ± 0.8	76.6 ± 3.1
Control+TP4/2	19.5 ± 0.9	20.2 ± 1.5	18.6 ± 1.3	78.7 ± 3.8
Control+TRH	20.4 ± 1.3	27.9 ± 1.3 ^a	32.9 ± 1.7 ^a	106.0 ± 3.5 ^b
Control+TP4/2+TRH	19.1 ± 0.8	27.6 ± 1.3 ^a	31.7 ± 1.6 ^a	102.9 ± 3.6 ^b
B (tT4)				
Control	95.1 ± 2.5	96.2 ± 2.1	92.3 ± 2.1	380.6 ± 7.8
Control+TP4/2	94.5 ± 3.0	97.2 ± 3.5	94.3 ± 3.1	383.1 ± 9.5
Control+TRH	93.0 ± 4.3	108.3 ± 3.4 ^a	121.2 ± 3.9 ^a	423.8 ± 10.0 ^b
Control+TP4/2+TRH	93.2 ± 2.4	106.8 ± 2.5 ^a	122.3 ± 4.8 ^a	421.7 ± 7.6 ^b
C (tT3)				
Control	2.6 ± 0.1	2.5 ± 0.1	2.3 ± 0.2	10.00 ± 0.38
Control+TP4/2	2.6 ± 0.1	2.5 ± 0.2	2.4 ± 0.2	9.97 ± 0.41
Control+TRH	2.5 ± 0.1	2.9 ± 0.1	3.9 ± 0.3	11.80 ± 0.17 ^b
Control+TP4/2+TRH	2.5 ± 0.2	2.8 ± 0.2 ^a	3.8 ± 0.3 ^a	11.64 ± 0.57

Note. TP4/2 was administered into male rats (i.p., 20 mg/kg, in 200 µL of DMSO), and the control group was injected with DMSO (i.p., 200 µL), a solvent for TP4/2. Thyrotropin-releasing hormone (TRH) (“Sigma-Aldrich”, USA) was administered intranasally (300 µg/kg, in 20 µL of saline). The first blood sampling was obtained at 10.00. At 10.30 the groups Control+TP4/2 and Control+TP4/2+TRH were injected with TP4/2, and the groups Control and Control+TRH were treated with DMSO. At 11.00 the groups Control+TRH and Control+TP4/2+TRH were treated with intranasally administered TRH, and the groups Control and Control+TP4/2 were treated with intranasally administered saline instead of TRH. At 12.30 and 14.00 the second and third blood samples were obtained ($n=5$ in each group). The blood samples were obtained from the tail vein using a local anesthesia (2% lidocaine solution, 2–4 mg/kg). The blood levels of free (fT4) and total (tT4) thyroxine and total triiodothyronine (tT3) were determined using the ELISA kits obtained from “Immunotech” (Russia). ^a - the difference between the levels of thyroid hormones at 10.00 and their levels at 12.30 and 14.00 is significant at $p < 0.05$; ^b - the difference between the control and TRH-treated rats is significant at $p < 0.05$. The data are presented as the $M \pm SEM$, $n=5$.