



Corrigendum

Substance P stimulates human airway submucosal gland secretion mainly via a CFTR-dependent process

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Citation for this corrigendum: *J Clin Invest*. 2010;120(3):931–932. doi:10.1172/JCI37284C1.

Following the publication of this manuscript, the authors discovered carbachol contamination of an aliquot of substance P used to generate the data in Figures 7A and 7B in the published version of this work. The authors have performed the relevant experiments again with a fresh, uncontaminated aliquot of substance P. The previously published data and the corrected data are compared in Table 3 below. The corrected text describing the new data for the Results section and the corrected Figure 7 appear below. The authors confirm that the conclusions of their study remain unchanged.

In unstimulated cells, $[Ca^{2+}]_i$ was 70–140 nM. SubP increased $[Ca^{2+}]_i$ in 47 of 58 cells from 8 subjects by 133 ± 35 nM (peak value). All 58 cells responded to carbachol with increases in $[Ca^{2+}]_i$ that were larger than those to SubP; the responses to 1 and 10 μ M carbachol were 186 ± 17 nM and 231 ± 36 nM, respectively. We considered the possibility that gland cells that are unresponsive to SubP might be a different cell type. To help differentiate serous and mucous cells in some of the dispersed cell preparations, we used PAS staining and observed a negative correlation between PAS reactivity and SubP responsiveness. For SubP-responsive cells, 7 of 25 (28%) were PAS positive (contain mucus), while for SubP-nonresponsive cells, 6 of 8 (75%) were PAS positive.

The authors regret the errors.

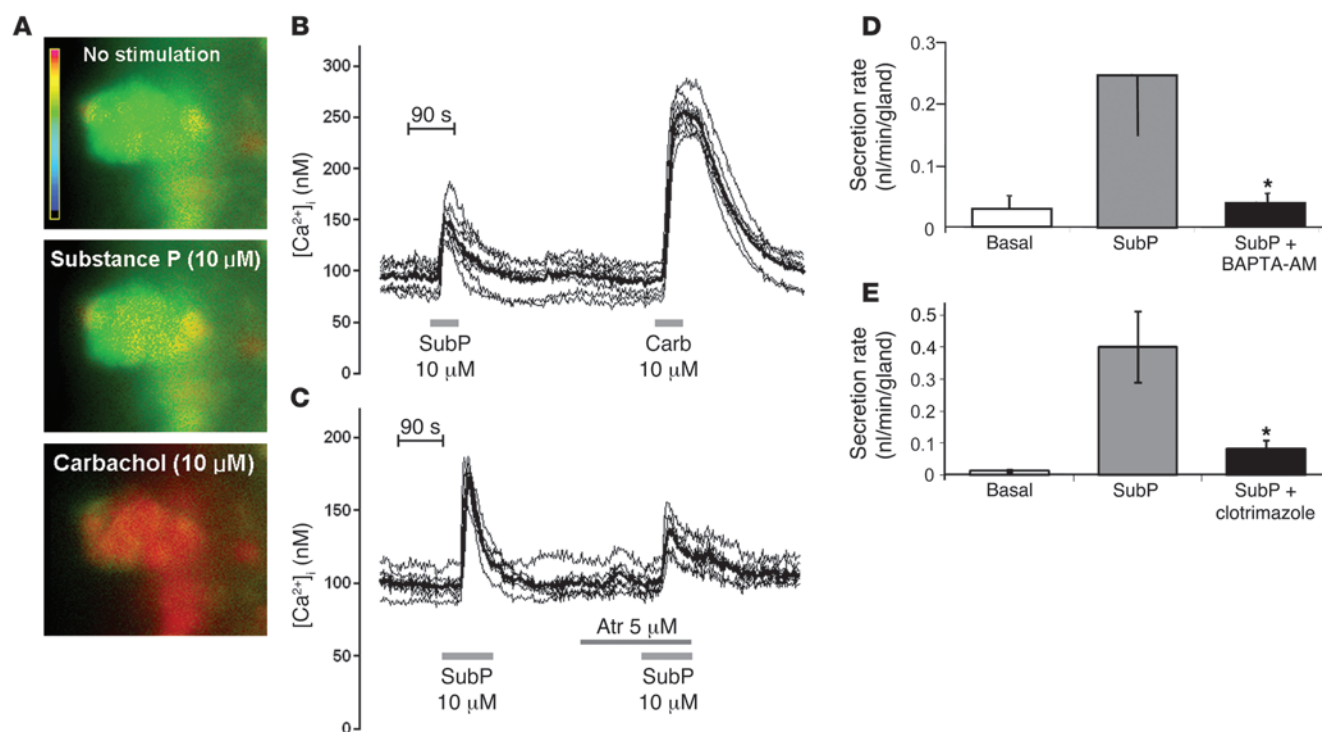


Figure 7

Evidence that SubP stimulates gland secretion, in part, via elevating $[Ca^{2+}]_i$. **(A)** Fluorescence changes in response to 10 μ M SubP and 10 μ M carbachol. Cell diameters in images are approximately 20 microns. **(B)** $[Ca^{2+}]_i$ versus time for 10 cells from images in **A**, measured in response to sequential pulses of 10 μ M SubP and 10 μ M carbachol. **(C)** $[Ca^{2+}]_i$ versus time for 10 cells from images in **A**, measured in response to sequential pulses of 10 μ M SubP without and with 5 μ M atropine (Atr). Fluorescence ratio, 340 nm/380 nm. **(D)** Mean response to SubP in presence or absence of BAPTA-AM (500 μ M); 4 experiments from 2 HN and 1 DC subjects (16–20 glands). Error bars are SEM. **(E)** Mean response to SubP in the absence and presence of clotrimazole (25 μ M), which blocks Ca^{2+} -activated K^+ channels ($n = 4$, 27–42 glands). * $P < 0.05$ versus SubP responses. Error bars are SEM.



Table 3

Summary of original and new experiments with Substance P and intracellular calcium

	I	II	III	I + II	II + III
	Original experiment with suspect SubP	Original experiments with good SubP	New experiments	Published data	Corrected data
Resting $[Ca^{2+}]_i$	72–105 nM	70–120 nM	85–140 nM	70–120 nM	70–140 nM
<i>n</i> , subjects; <i>n</i> cells	1; 6	4; 33	4; 25	5; 39	8; 58
<i>n</i> (%) cells responding to SubP	6/6 (100%) ^A	25/33 (76%)	22/25 (88%)	31/39 (79%)	47/58 (81%)
$[Ca^{2+}]_i$ response to SubP (peak value, nM)	134 ± 34 ^A	140 ± 32	125 ± 18	139 ± 33	133 ± 35
<i>n</i> cells responding to carbachol (1 or 10 μM)	6/6 (100%)	33/33 (100%)	25/25 (100%)	39/39 (100%)	58/58 (100%)
$[Ca^{2+}]_i$ response to Carb 1 μM (peak value, nM)	194 ± 10	186 ± 17	Not done	187 ± 19	186 ± 17
$[Ca^{2+}]_i$ response to Carb 10 μM (peak value, nM)	256 ± 20	252 ± 15	202 ± 35	253 ± 17	231 ± 36
PAS positivity in SubP responsive cells	2/6 (33%)	7/25 (28%)	Not done	9/31 (29%)	7/25 (28%)
PAS positivity in SubP nonresponsive cells	NA	6/8 (75%)	Not done	6/8 (75%)	6/8 (75%)
% cells responding to SubP (10 μM) in presence of atropine	Not done	Not done	22/22 (100%)	Not done	22/22 (100%)

^APublished data generated using possibly contaminated Substance P.

Corrigendum

FoxO1 expression in osteoblasts regulates glucose homeostasis through regulation of osteocalcin in mice

Marie-Therese Rached, Aruna Kode, Barbara C. Silva, Dae Young Jung, Susan Gray, Helena Ong, Ji-Hye Paik, Ronald A. DePinho, Jason K. Kim, Gerard Karsenty, Stavroula Kousteni

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The legend for Figure 5H was incorrect. The correct text appears below.

(H) Changes in uncarboxylated or undercarboxylated Ocn in serum of WT and *Foxo1^{ob-/-}* mice; *n* = 5 mice/group.

The authors regret the error.

Erratum

Urea-induced ROS generation causes insulin resistance in mice with chronic renal failure

Maria D'Apolito, Xueliang Du, Haihong Zong, Alessandra Catucci, Luigi Maiuri, Tiziana Trivisano, Massimo Pettoello-Mantovani, Angelo Campanozzi, Valeria Raia, Jeffrey E. Pessin, Michael Brownlee, and Ida Giardino

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During the preparation of the manuscript, the urea infusion rate was incorrectly given. The correct sentence containing the infusion rate appears below.

The rats were allowed to recover from the surgery for 5 days and then were either infused with isotonic PBS or urea (100 mg/kg/h) for 48 hours using a microdialysis pump.

The *JCI* regrets the error.