

Accepted Manuscript

Carbon Monoxide, Hydrogen Sulfide, and Nitric Oxide as Signaling Molecules in the Gastrointestinal Tract

Gianrico Farrugia, Joseph H. Szurszewski



PII: S0016-5085(14)00597-6
DOI: [10.1053/j.gastro.2014.04.041](https://doi.org/10.1053/j.gastro.2014.04.041)
Reference: YGAST 59115

To appear in: *Gastroenterology*
Accepted Date: 24 April 2014

Please cite this article as: Farrugia G, Szurszewski JH, Carbon Monoxide, Hydrogen Sulfide, and Nitric Oxide as Signaling Molecules in the Gastrointestinal Tract, *Gastroenterology* (2014), doi: 10.1053/j.gastro.2014.04.041.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

All studies published in *Gastroenterology* are embargoed until 3PM ET of the day they are published as corrected proofs on-line. Studies cannot be publicized as accepted manuscripts or uncorrected proofs.

GASTRO 14-00280R

Title: Carbon Monoxide, Hydrogen Sulfide, and Nitric Oxide as Signaling Molecules in the Gastrointestinal Tract

Gianrico Farrugia and Joseph H. Szurszewski

Enteric NeuroScience Program, Division of Gastroenterology and Hepatology and Department of Physiology and Biomedical Engineering, Mayo Clinic, Rochester, MN

Short title: CO and H₂S

Grant Support: DK 57061, DK 52766, DK 17238, PO1 DK68055

Abbreviations: CO, carbon monoxide; H₂S, hydrogen sulfide; AQP, aquaporin channels; CO₂, carbon dioxide, NH₃, ammonia; HMOX, heme oxygenase gene, ICC, interstitial cells of Cajal; PKC, protein kinase C; NOD, non-obese diabetic; cGMP, cyclic guanylyl cyclase; CORM, CO releasing molecule; CBS, cystathionine β synthase; CTH, cystathionine γ lyase; 3MST, 3-mercaptopyruvate sulfurtransferase; SQR, sulphide quinone reductase; NaHS sodium hydrosulfide, Nrf2, nuclear factor erythroid-related factor

Disclosures: The authors disclose no conflicts.

Author Contributions: Joseph H. Szurszewski and Gianrico Farrugia were both involved in the manuscript analysis and interpretation of data, drafting of the manuscript, critical revision of the manuscript for important intellectual content, and they both obtained funding.

Corresponding author: Gianrico Farrugia, M.D.
Mayo Clinic
200 First St. SW
Rochester, MN 55905
Phone: 507-284-4695
Fax: 507-284-0266
Email: farrugia.gianrico@mayo.edu

Copyright 2014 Mayo Foundation for Medical Education and Research

Download English Version:

<https://daneshyari.com/en/article/6095218>

Download Persian Version:

<https://daneshyari.com/article/6095218>

[Daneshyari.com](https://daneshyari.com)