for the 80% oxygen group) may wonder after reading the Grief paper, while munching bagels in some doctors' lounge, whether they should immediately embrace the amazing new adjunct. Who does not want to be au courant? At my institution, the wound-infection rate for colon resection over the past 10 years (3.8%) has been measured by a rigid program of continuous, global, 30-day infection surveillance that does not depend upon culture results as confirmatory or exculpatory data.[6] Should I and my partners add 80% oxygen prophylaxis for all colon resections starting tomorrow? If we do, how will we know if we used it correctly or if it had any benefit? Maybe most surgical patients at every hospital should receive 80% oxygen under the inspiration of "can't hurt, might help." There are not going to be easy answers here, but we may surmise that orders for 80% oxygen and purchases of the special masks will increase across the land real soon. I also predict much premature joy at any hospital where the natural up-down cycling of surveillance infection rates (ie, random process noise) just happens to be in its "down" mode after 80% oxygen use begins. Remember, we will be using this adjunct under nonresearch conditions, with the outcome data being estimated infection rates that come from surveillance programs already battling numerous issues of case-finding sensitivity, uniformity, and personnel budget crimps. The *post hoc ergo propter hoc* fallacy will be an uninvited visitor at infection control conferences.

Perceptive readers of the Grief article are going to notice one more thing. Surgeons who participated in the study achieved a 5.2% infection rate at 15 days using 80% oxygen but uniformly eschewed (as many European surgeons do) the use of orally administered, non-absorbed antibiotics as an element of preoperative colon preparation. That thoroughly tested tactic, along with some kind of mechanical preparation of the colon, is used by a majority of surgeons in the United States in combination with intravenous antibiotic prophylaxis that covers bowel flora.[7] Misunderstanding of this belt-and-suspenders approach is legendary. The oral antibiotic component provably reduces the level of both aerobic and anaerobic intraluminal pathogens so that any spillage of colon contents poses a smaller challenge to the patient's defenses than would stool itself. Correctly administered systemic antibiotics preload the extracellular fluid space and render it bacteria-unfriendly throughout the entire operation. Here is the punch line: we do not know, and the elaborate Grief study was unfortunately not designed to test, whether adding 80% oxygen prophylaxis to state-of-the-art colon preparation along with accurate prophylactic antibiotic infusion reduces infection risk in colon-rectal operations.

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Surgical-Site Infections in Mexico

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Vilar-Compte and colleagues from the Instituto Nacional de Cancerologia and Instituto de Investigaciones Biomedicas, Universidad Nacional Autonoma de Mexico, conducted a study to quantify the surgical infection rate and to identify risk factors associated with surgical-site infection (SSI) in a 130-bed tertiary-care teaching hospital for adult patients with cancer.

A case-control study of all surgical patients (313) was done between January 1, 1993, and June 30, 1994; the study followed 3,372 surgeries (rate/100 surgeries: 9.30). Risk factors associated with SSI were diabetes mellitus, obesity, presence of surgical drains for >5 and <16 days, and presence of surgical drains for ≥16 days, similar to those previously reported. The bacteria isolated most frequently were *Escherichia coli,* 38 (21.8% of the total of microorganisms found); *Pseudomonas* species, 22 (12.6%); *Staphylococcus aureus,* 16 (9.2%); and coagulase-negative staphylococci 25 (13.6%). The coexistence of other nosocomial infections was greater among cases (odds ratio, 1.8; 95% confidence interval, 1.1-3.1) than the controls.

The authors concluded that the SSI rate in their hospital is slightly higher than the rates reported for general hospitals.

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