antibiotics and increased mortality rate has also been reported.[4] Admittedly, nonrandomized studies may be biased if patients with more severe disease are more likely to receive antibiotics, but it has been suggested that antimicrobial therapy for *E. coli* O157:H7 infection may be harmful because the antibiotics are able to lyse or damage the infective organisms, leading to release of greater amounts of toxin.[5] Consequently, antibiotic therapy for patients with intestinal infection due to *E. coli* O157:H7 is not currently recommended.[3]

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This timely public health page highlighted several interesting findings from the study of sporadic *E. coli* O157 infections in the United Kingdom.[1] Given the suspect cooking procedures of some of the burger chains described, many of us fast food fans are now peering anxiously over countertops. Perhaps the old slogan "Where's the beef?" should be revived as "Where's the beef been?"

However, one potentially important risk factor was not examined in the *Lancet* paper: consumption of dry fermented salami. This product was implicated in a 1994 outbreak in the US[2] and an outbreak this past spring in the Hamilton–Wentworth and Niagara regions of Ontario. The latter outbreak involved more than 30 people and led to a recall by the manufacturer of products distributed in Canada and the US.

Microbiological studies performed in the wake of the US outbreak found that *E. coli* O157 could survive currently accepted processing methods for dry fermented salami.[3] These outbreaks and the laboratory evidence raise the possibility that such products are an underrecognized cause of sporadic cases of infection and suggest that patients should be questioned specifically about consumption of these foods.

As for antibiotic therapy, it has not been demonstrated that "treatment with trimethoprim or trimethoprim–sulfamethoxazole is helpful," as was stated in the article. The one randomized controlled trial found no reduction in symptoms or risk of hemolytic–uremic syndrome in those treated with trimethoprim–sulfamethoxazole.[4] It is not known whether earlier initiation of therapy might be helpful.

Fosfomycin, used widely in Japan for pediatric gastrointestinal infections but not licensed in Canada, reduces the risk of hemolytic–uremic syndrome after infection with *E. coli* O157.[5] However, the study reporting these results was retrospective, and they should be interpreted with caution.

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The second-last sentence of this article states that "treatment with trimethoprim or trimethoprim–sulfamethoxazole is helpful," but there is no convincing evidence that antimicrobial treatment reduces the risk or severity of hemolytic–uremic syndrome. Antimicrobial therapy may even enhance toxin production or release in vitro.[1,2] In some observational studies and case series, patients treated with antimicrobial agents had worse outcomes than those who were not,[3–6] whereas in other series antibiotic use was associated with a lower[7,8] or unchanged[9] risk of hemolytic–uremic syndrome. On the basis of current knowledge, physicians should be advised to avoid antimicrobial treatment of known or suspected enterohemorrhagic disease due to *E. coli* O157.

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Yet another Dr. King

After reading Charlotte Gray's article "Dr. Max King: the sad life and early death of Mackenzie King's physician brother" (*CMAJ* 1998;158[8]:1066-70), I thought readers would be interested to know that Mackenzie King had another close relative who was not only a doctor but also his namesake.

A recent book about the Canadian destroyer HMCS *St. Croix* and the German submarine *U 305* and their roles in the Battle of the Atlantic[1] mentions that on one mission "there [was] a celebrity of sorts aboard: Surgeon-Lieutenant William Lyon Mackenzie King, thirty, [who] is the nephew and namesake of Canada's Prime Minister." This Dr. King was one of the twin sons born to Max King and May Wookey.

The *St. Croix* sailed from Plymouth on Sept. 15, 1943, and was torpedoed 5 days later. Dr. King was among the missing.

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Lifestyle and genetic susceptibility

Dr. Michael M. Burgess and colleagues, in their article "Bioethics for clinicians: 14. Ethics and genetics in medicine" (*CMAJ* 1998;158[10]:1309-13) correctly conclude that counselling patients at high risk for genetic diseases is complicated and may be associated with unexpected reactions. For example, from the caregiver's viewpoint it might seem obvious that a person with relatively high genetic susceptibility to a disease would be willing to modify some of his or her risk factors. However, patients may not reach this conclusion on their own.

As an example, we studied a family in which several members had early-onset coronary artery disease and virtually no high-density lipoproteins (HDL), the result of homozygosity for a truncated variant of apolipoprotein (apo) AI.[1] Although homozygosity for the apo AI mutation was clearly associated with increased risk of coronary artery disease, some elderly homozygous family members were unaffected. We found that risk factors such as smoking and hypertension modulated the onset and severity of the condition in homozygous people.[2] When we informed these family members about their genetic susceptibility, some of them incorrectly inferred that the development of the condition was genetically predestined and that its future expression was outside their control. Therefore, they felt justified in continuing such high-risk behaviours as smoking. However, their attitude changed when we explained to them that (1) the relative hazard from genetic factors for a complex disease such as coronary artery disease was much smaller than that for a monogenic disease, such as cystic fibrosis,[3,4] and (2) modifiable nongenetic factors contributed at least as much as genetic factors to the risk of coronary artery disease.[3,4]

Coronary artery disease results from the interaction of genetic and environmental factors, of which the latter are largely within an individual's control.[4] The influence of a particular genetic factor in an individual at risk for this condition is usually the aggregate of many small effects.[3] However, even in a family with a major gene affecting high-density lipoprotein metabolism, the expression of coronary artery disease can be delayed by modification of risk factors.[2] For almost all complex diseases, the inherited factors create a background of susceptibility but are not the ultimate cause of the disease. With the potential for increased application of genomic diagnostic methods, health care providers must anticipate the full spectrum of patients' responses and allow sufficient time to properly explain test results.

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