suggests that the dopamine-induced changes in renal blood flow (RBF), renal vascular resistance (RVR), filtration fraction (FF), renal oxygen extraction (RO_2Ex) and renal extraction of PAH, which was described in our paper, may not necessarily be ascribed to dopamine itself but to spontaneous fluctuations and time-dependent fluctuations of renal variables, as post-operatively, there are ... 'a great number of physiologic variations: changes in cardiac output, in systemic vascular resistance, haemoglobin level, volume loads, use of blood products and vasoactive drugs, among others'. First of all, we would like to stress that neither blood products nor vasoactive drugs (other than dopamine) were given during the experimental procedure. If the patient was unstable, he/she was not included in the study. We agree, however, that one major limitation of our study was the lack of a control group, not receiving dopamine, that could control for these potential time-dependent spontaneous fluctuations of the renal variables, which we also discussed at length in our paper. On the other hand, data on renal and systemic haemodynamics, as well as on renal function and oxygen metabolism, obtained during the two control periods before the start of dopamine infusion, did not differ significantly, but even more importantly, all data on renal variables returned to baseline after discontinuation of dopamine infusion. This suggests, at least to us, that the changes in RBF, RVR, FF, RO_2Ex and renal extraction of PAH, which we observed during dopamine infusion, were caused by dopamine itself and not by changes in baseline conditions during the experimental procedure.

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Implementation of selective digestive decontamination in the intensive care unit: a word of caution

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Sir,

The use of selective decontamination of the digestive tract (SDD), a prophylactic antibiotic regimen applied in the treatment of patients in intensive care, is a topic of intense debate. Recently, de Smet et al.[1] showed improved survival rates in intensive care unit (ICU) patients (with an expected duration of mechanical ventilation of >48 h) who were treated with SDD or selective oral decontamination (SOD). They also showed a reduction in the use of most systemic broad-spectrum antimicrobial agents in comparison with the standard group. However, it is worth noting that total antimicrobial use was also low in the standard group as shown in Fig. 1, which compares the Dutch study with corresponding data in the Swedish Intensive Care Registry. The question arises as to whether the low use of antibiotics contributed to the positive effects of SDD and SOD. Patient age, APACHE II scores and 28-day survival in the standard group of the Dutch study were all quite similar to data in the Swedish Intensive Care Registry after exclusion of patients who stayed <48 h (Dutch study vs. SIR: 61.4 ± 16.2 vs. 62.1 ± 16.6 years, 18.6 ± 7.9 vs. 20.3 ± 8.0 points [means ± SD] and 27.5% vs. 23.4%).

Our comparison indicates that consumption of antimicrobial agents was lower in the Dutch study than in Swedish ICUs and, according to the literature, in Danish and German ICUs.[2,3] The significance of this observation is not clear to us. The Netherlands, Sweden and Denmark have similar low rates of multidrug-resistant microorganisms in the community, hospital and ICU.[4] The positive effects of SDD and SOD in the study by de Smet and colleagues may have been due to an overall restricted use of antibiotics in the Dutch ICUs and thus not directly applicable to ICUs with greater baseline antibiotic consumption. An analysis of relationships between baseline use of antimicrobial agents and survival rates per ICU in the Dutch

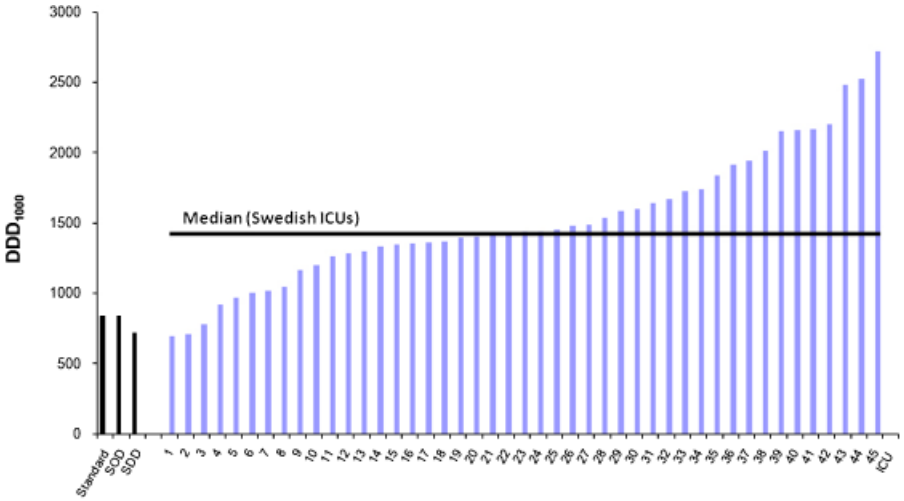

Fig. 1. Antimicrobial use in the study by de Smet et al.[1] (black bars showing median DDD_{1000} per group) and in the Swedish Intensive Care Registry 2008 (grey bars showing DDD_{1000} in 45 ICUs). DDD_{1000}, defined daily doses per 1000 patient days; SDD, selective digestive decontamination and SOD, selective oral decontamination.

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study is one step that could further our understanding of the role of SDD and SOD. If SDD and SOD allow reduced overall antibiotic use without causing an increase in adverse outcomes, these two strategies may be an important way to decrease overall antibiotic consumption in the ICU.

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