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Answer to the comment of Dr. Petros et al. on our manuscript about accumulation of oral antibiotics as an adverse effect of selective decontamination of the digestive tract

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This reply refers to the comment available at: doi:10.1007/s00134-008-1136-2.

Dear Editor-in-Chief,
Dr. Petros et al. noted in their comment to our case-report about accumulation of oral antibiotics in the digestive tract [1] that, we did not estimate the incidence of this side effect. No published case-reports of selective decontamination of the digestive tract (SDD) accumulation were found and we are not aware of similar cases besides our report. Therefore, SDD accumulation seems very rare. It may remain unrecognized, but apparently an accumulation of clinical importance has not been described earlier.

Dr. Petros et al. also requested us to report the composition of the SDD paste and suspension. The SDD liquid suspension is composed of polymyxin E, tobramycin-sulphate, water, methylhydroxybenzoate and amphotericin B. The latter suspension contains carboxymethylcellulose. In case 1, the SDD paste includes liquid paraffin and hypromellose besides the antibiotics. In cases 2 and 3, Orabase (Convatec) is used instead of hypromellose.

Furthermore, in the ICU departments of cases 1 and 3, nasogastric tubes were manufactured from transparent polyvinyl chloride and not changed on a routine base.

The alternative diagnoses suggested by Dr. Petros et al. are highly appreciated. However, esophageal obstruction by solidification of enteral feed is very rare and seldom reported in the literature. Interactions with drugs like sucralfate may play a role [2], but in none of our cases sucralfate was administered. In our cases, SDD compounds were identified in the clots by pharmaceutical analysis in different parts of the gastro-intestinal tract. Awareness of potential accumulation of SDD in the digestive tract may lead to early recognition and prevention of this complication. Thorough cleansing of the oropharynx before applying the next dose of SDD paste might prevent this complication. However, this apparently seldom occuring complication should not prohibit application of SDD as a proven strategy to decrease nosocomial infections and mortality in critically ill patients.

References

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