Table 1 Regimen Descriptions

All patients received routine oropharyngeal care consisting of oral washings with sterile water (3-4 times daily). If oropharyngeal contamination was visually evident, it was cleaned with a swab moistened in 1.5% hydrogen peroxide. Teeth were brushed twice daily. Chlorhexidine was not used.

SELECTIVE DECONTAMINATION OF THE GASTRO-INTESTINAL TRACT (SDD)

Until discharge from the ICU:

- Oropharyngeal application (every 6 h) of a paste containing polymyxin E, tobramycin and amphotericin B each in a 2% concentration.
- Administration (every 6 h) of a 10 mL suspension containing 100 mg polymyxin E, 80 mg tobramycin and 500 mg amphotericin B via a nasogastric tube.

For the first 4 days:

- Cefotaxime (1000 mg, every 6 h) intravenously.
- The use of antibiotics with significant anti-anserobe activity was discouraged.

Modifications:

In patients with tracheostomy the paste was applied around the tracheostomy. In patients with a duodenal tube or jejunostomy, 5 mL of the suspension was given via the gastrictube and the remaining 5 mL via the duodenal tube or jejunostomy. Patients with colostomy or ileostomy stomas received SDD-suppositories (containing 100 mg polymyxin E, 40 mg tobramycin and 500 mg amphotericin B) twice daily in the distal part of the gut.

Surveillance culture results could lead to modifications:

• Application of oropharyngeal paste was increased to eight times daily, if the first surveillance culture of the throat yielded yeasts, until two surveillance cultures were negative.

• 5 mL (5 mg) amphotericin B was nebulized 4 times daily if a sputum surveillance culture (not admission culture) yielded yeasts, until two sputum cultures became negative.

• 5 mL (80 mg) polymyxin E was nebulized 4 times daily if a sputum surveillance culture (not admission culture) yielded Gram negative bacteria, until two sputum cultures were negative.

SELECTIVE OROPHARYNGEAL DECOTAMINATION (SOD)

- Oropharyngeal application (every 6 h) of a paste containing polymyxin E, tobramycin and amphotericin B each in a 2% concentration.
- · There were no restrictions on use of systemic antibiotics.

Modificatiions:

• In patients with tracheostomy the paste was applied around the tracheostomy.

Surveillance culture results could also lead to modification:

• Application of oropharyngeal paste was increased to 8 times daily, if the first surveillance culture of the throat yielded yeasts, until two surveillance cultures were negative.

STANDARD OF CARE (SOC)

There were no restrictions on use of systemic antibiotics. No survellance cultures were performed.