

Abstract

Safe surgery is the result of efficient maintenance of technical actions in the operating theater and the interaction between professionals and areas with the aim of a free service risks. Post operative infections represent a large proportion of deaths and medical injuries, a figure estimated at 0.5% in the world.

One of relevant factor is the medical and hospital supplies, which must be controlled from cleaning up the opening of the boxes in the operating theater. At the Hospital do Coração (HCor) - São Paulo, this step is performed at nursing staff preceding the start of the surgical procedure. The objective was to verify that the opening of sterile instruments by the nursing staff and their exposure in the operating room preceding the procedure does not interfere with maintenance of sterility for a set period of time.

Was selected a box containing 125 surgical instruments that were arranged on a table with sterile technique. We checked every 01 hours for a period of 06 hours, samples of the table. After the sixth hour was selected the center of the table and the left side until completing 12 hours. For evaluation we used the residual protein contamination monitoring system ATP[®] established as a result expected zero, taking into account that the waste material can not possess residual contamination. 40 swab test on the samples were carried out without any result greater than zero proved the sterility of the instruments and consequently its maintenance in the operating theater for extended period of 12 hours indicating that the risk of surgical site infection is not linked to the opening as well as its exposure from the material.

Methods



This research was developed on March 2, 2015, in OR 10 of the HCor. Was selected a box containing 125 surgical instruments used in cardiac surgery that were arranged on a table with sterile technique. We checked every 01 hours for a period of 06 hours, samples of the four handedness of the table making a smear on the most distal instrumental arranged as follows: right side - spatula; Left Side - wire cutter; front - kelly straight; Table background - backaus. After the sixth hour was selected the center of the table and the left side of the proximity to the room door, until completing 12 hours. Although the value suggested by the manufacturer to be 45RLU to consider the clean material, the value zero was defined by the authors, taking into account that the waste material may not have any residual media.

Results

Sample/Time	1st hour	2nd hour	3rd hour	4th hour	5th hour	6th hour
Right side	0	0	0	0	0	0
Left side	0	0	0	0	0	0
Front	0	0	0	0	0	0
Background	0	0	0	0	0	0

Table 1: Results of the samples within the first 6 hours.

Sample/Time	7th hour	8th hour	9th hour	10th hour	11th hour	12th hour
Left side	0	0	0	0	0	0
Center	0	0	0	0	0	0

Table 2: Results of the 7th to the 12th hour samples.

Conclusion

This study assured the sterility of the instruments and consequently its maintenance in the operating theater for extended period of 12 hours. The results showed that the risk of surgical site infection is not linked to the opening as well as its exposure from the material moment that the team follow the aseptic protocols. This research was the first step towards a more scientific approach, already in progress at the institution, to deepen the results.