

Introduction

Patients hospitalized at the department (PHOBMTD) are immunocompromised due to an extensive exposure to chemotherapy treatments and broad-spectrum antibiotics.

Of the 805 patients who were admitted to the department during the year of 2017, 22% developed bacteremia, which led to central line associated bloodstream infection.

Method:

- Implementation of 3M™ Curos™ Disinfecting Caps on all needless connectors replacing the "scrub the hub" practice.
- Staff simulation of proper central line care including aseptic blood draws and blood cultures.
- Information regarding catheter presence and catheter days was retrieved from computerized data and nurses' documentation.

Objective:

The aim of the intervention was to reduce hospitalization days due to central line associated bloodstream infections and other complications by implementing a preventative measure and early intervention in the immunocompromised patients admitted to the department.

“According to the manufacturer 3M™Curos™ Caps disinfect in 1 minute and protects IV access points for up to 7 days if not removed. It helps reduce risk of contaminants from entering the catheter through the IV port”.



Data

2018 data (pre intervention)

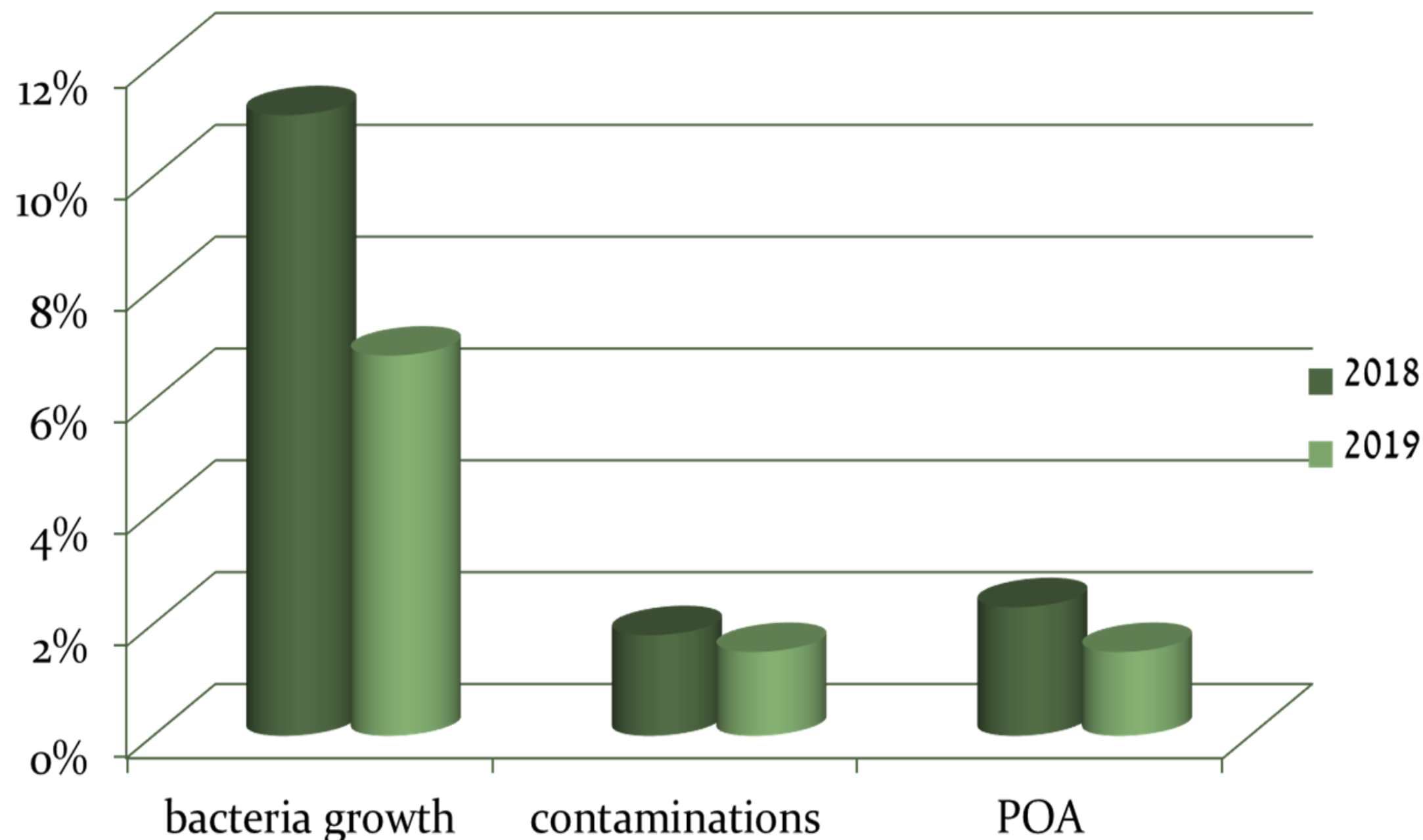
01.07.2018 - 30.09.2018

	July	August	September	Total
Total Blood cultures	165	169	142	476
Bacteria growth in blood culture	19	19	15	53
contaminations	1	3	6	9
Bacteria growth in non-neutropenic patient's blood culture	0	8	6	14
POA (presence on admission)	1	8	2	11

2019 data (after intervention)

01.07.2019 - 30.09.2019

	July	August	September	Total
Total Blood Culture	139	151	176	466
Bacteria growth in blood culture	11	13	8	32
Contaminations	-	5	2	7
Bacteria growth in non-neutropenic patient's blood culture	2	8	5	15
POA (presence on admission)	-	4	3	7



Results

- * Bacteremia decreased by 40% compared with the previous year (2018).
- * Culture contaminations decreased by 17%, and present on admission (POA) bacteremia decreased by 35%.
- * 98% compliance rate was achieved within three weeks of implementing the use of the 3M™ Curos™ caps.

Conclusion

The positive clinical results, team satisfaction, and high compliance rate (over 98%), influenced the decision to implement the same standard of central line care in the outpatient hemato-oncology clinic and hospice unit of the department. The results reported are preliminary results and further research is required to establish the advantages (reduce hospitalization days) of the intervention.