

POSTER PRESENTATION

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Cost of organ/space infection in elective colorectal surgery. Is it just a problem of rates?

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Introduction

Organ/space (O/S) infection in colorectal surgery remains a major health problem. In Catalonia, the VIN-Cat Program has monitored 24,832 procedures during 2007-2014, showing a steady rate of O/S infection over the years, 8.2% (95% CI 7.9 - 8.6). Improving awareness of stakeholders could be an easy strategy for assembling quality programs within health systems.

Objectives

Evaluating excess costs of organ/space infections associated with elective colorectal surgery in the Catalan Health System.

Methods

We selected a sample of 10 different sized hospitals that provided data to VINCat from January 2012-June 2014. To estimate the excess of cost we based on differences between lengths of stay in patients with and without O/S infection and extra-cost related to readmission/need of ICU and re-operation.

Results

A total of 2276 patients underwent elective colorectal surgery. O/S infection occurred in 193 (8.5%). Patients with O/S were more frequently men (73% versus 60%; $p = 0.001$); underwent a rectal procedure (43% versus 31%; $p < 0.001$) and had NNIS index ≥ 1 (43% versus 34%; $p = 0.06$). Median length of stay was 3 fold higher (22 days versus 7 days; $p < 0.001$) when O/S occurred which accounted for an extra cost of €3,052 per patient. Within the group of O/S infection, 45/193 (23%) patients were

re-admitted with a median length of stay of 13 days [IQR 8 - 17)]; 117/193 (60%) required re-operation and 56/193 (29%) required intensive care unit stay with a median length of stay of 5 days [IQR 3 - 12]. This added an additional cost of €2,235 per patient. Accordingly, 193 O/S infections accounted for an overall excess cost of €1,020,391.

Conclusion

O/S infection represents an important excess of cost for the Catalan Health System. The reinforcement of quality strategies can lead to a strong reduction in the use of resources and relieve its current financial constraints.

Disclosure of interest

None declared.

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