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Profilaxia em infecção de corrente sanguínea

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Por que pensar em profilaxia?

- Reduzir morbimortalidade
- Diminuir infecções por germes MDR

Boas práticas em neutropenia febril (acessar o risco diariamente)

Estratégias para poupar carbapenêmicos

Uso racional de antimicrobianos

Annals of Hematology (2021) 100:2825–2830
<https://doi.org/10.1007/s00277-021-04673-y>

ORIGINAL ARTICLE

Early removal of central venous catheters and its effect on the in-hospital mortality in patients with acute leukemia

”Early removal of the CVC had no significant effect on the mortality (OR = 1.16, 95% CI: 0.54–2.47, $p = 0.706$) in univariate analysis. Furthermore, subsequent bloodstream infection after clinical decision for maintenance or early removal of the CVC was confirmed more frequently in the group with early removal (early removal, 22.6%; maintenance, 7.6%, $p < 0.0001$)”

Tae-Hwan Kim¹ · Yong Won Choi¹ · Mi Sun Ahn¹ · Yoon Seok Choi¹ · Hyun Woo Lee¹ · Seong Hyun Jeong¹ · Seok Yun Kang¹ · Jin-Hyuk Choi¹ · Joon Seong Park¹  · Hyun Young Lee²

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Kim TH - Ann Hematol 2021

Coleta de hemoculturas: se há dispositivo, há coleta!

Impact of central venous catheter reinsertion before and after negative blood culture in patients with catheter-related bloodstream infections caused by *Staphylococcus aureus*

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Background

There are insufficient studies evaluating the clinical outcomes based on whether central venous catheter (CVC) reinsertion occurs before or after obtaining negative blood culture results. We assessed the clinical significance of the timing of CVC reinsertion in relation to negative blood culture results in patients with catheter-related bloodstream infections (CRBSIs) caused by *Staphylococcus aureus* (*S. aureus*).

Methods

In this retrospective cohort study, patients with CRBSI caused by *S. aureus* admitted to a tertiary-care hospital in South Korea from July 2008 through December 2018 were enrolled. The 90-day mortality and recurrence of bacteremia were compared between patients who underwent reinsertion of a central venous catheter before versus after confirmation of negative follow-up blood cultures.

Result

Table 1. Clinical outcomes of patients with CRBSI caused by *S. aureus*

Clinical outcomes	Reinsertion after negative blood culture (n = 95)	Reinsertion before negative blood culture (n = 128)	P value
90-day mortality, n (%)	19 (20.0)	43 (33.6)	0.04
90-day recurrence of bacteremia, n, (%)	4 (4.2)	9 (7.0)	0.55
Bacteremia duration (d), median (IQR)	1 (1-3)	3 (1-7)	<0.001
Metastatic infection, n, (%)	10 (10.5)	34 (26.6)	0.005

Table 2. Results of Cox regression analysis for CVC reinsertion before and after blood culture negativity

	90-day mortality		90-day recurrence of bacteremia	
	HR (95% CI)	P	HR (95% CI)	P
Univariate	1.88 (1.09 – 3.22)	0.02	1.92 (0.59 – 6.25)	0.28
Multivariate*	1.90 (1.02 – 3.52)	0.04	1.44 (0.34 – 6.08)	0.62
IPTW	1.57 (0.85 – 2.90)	0.15	1.44 (0.30 – 6.98)	0.65

Conclusions

We found that reinsertion of a CVC before negative follow-up blood culture results was significantly associated with increased 90-day mortality. These findings underscore the necessity of confirming negative follow-up cultures before CVC reinsertion in patients with CRBSIs caused by *S. aureus* as per societal guidelines.

Figure 1. Clinical outcomes of 387 patients with CRBSI caused *S. aureus* who underwent CVC reinsertion before, after negative blood culture or no reinsertion.

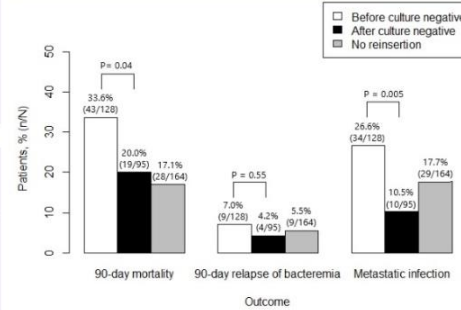
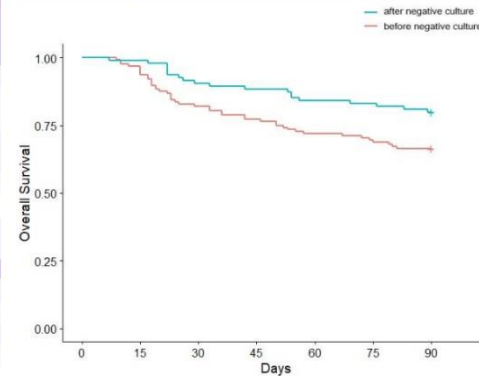


Figure 2. Cumulative Risks of 90-day Mortality. Kaplan–Meier curve analysis, according to timing of CVC reinsertion before or after negative blood culture.



- Estudo prospectivo de infecções em pacientes de 9 unidades de hematologia;
- ESBL – 23,2% das enterobactérias;
- **Uso de profilaxia com quinolona foi associado com aumento do risco de infecções por ESBL (9,7% vs 2,6%).**

Ann Hematol (2016) 95:1955–1963
DOI 10.1007/s00277-016-2815-7



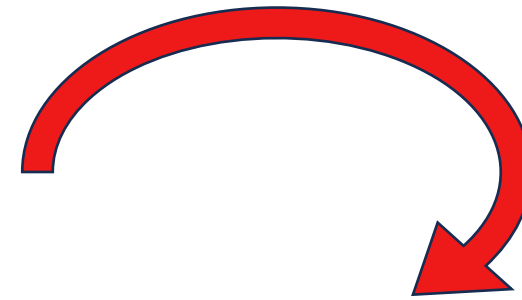
ORIGINAL ARTICLE

Emerging resistant bacteria strains in bloodstream infections of acute leukaemia patients: results of a prospective study by the Rete Ematologica Lombarda (Rel)

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Mas...o uso de quinolona é uma estratégia?

Fluoroquinolone resistance rates among community-acquired Enterobacteriaceae isolates in the United States have risen from < 1% to as high as 30% during the decade from the late 1990s to 2009.⁴¹ GI colonization by fluoroquinolone-resistant—and extended-spectrum β -lactamase-positive—gram-negative bacilli has been a risk factor for bacteremic events in the setting of GI mucositis, and fluoroquinolone resistance may result in inappropriate initial empirical antibacterial therapy and increased all-cause mortality.^{42,43} A threshold prevalence of fluoroquinolone resistance among *Escherichia coli* isolates above which the protective efficacy of fluoroquinolone prophylaxis may be limited has not been defined.⁴⁴



The activity of fluoroquinolone prophylaxis on the intestinal microbiome is to select not only for fluoroquinolone-resistant, gram-negative bacilli, but also for *Clostridium difficile* and enterococci.⁴⁵ Clinicians must be mindful of the clinical syndromes associated with these pathogens and appropriately tailor their therapeutic approaches.



THE BOTTOM LINE (CONTINUED)

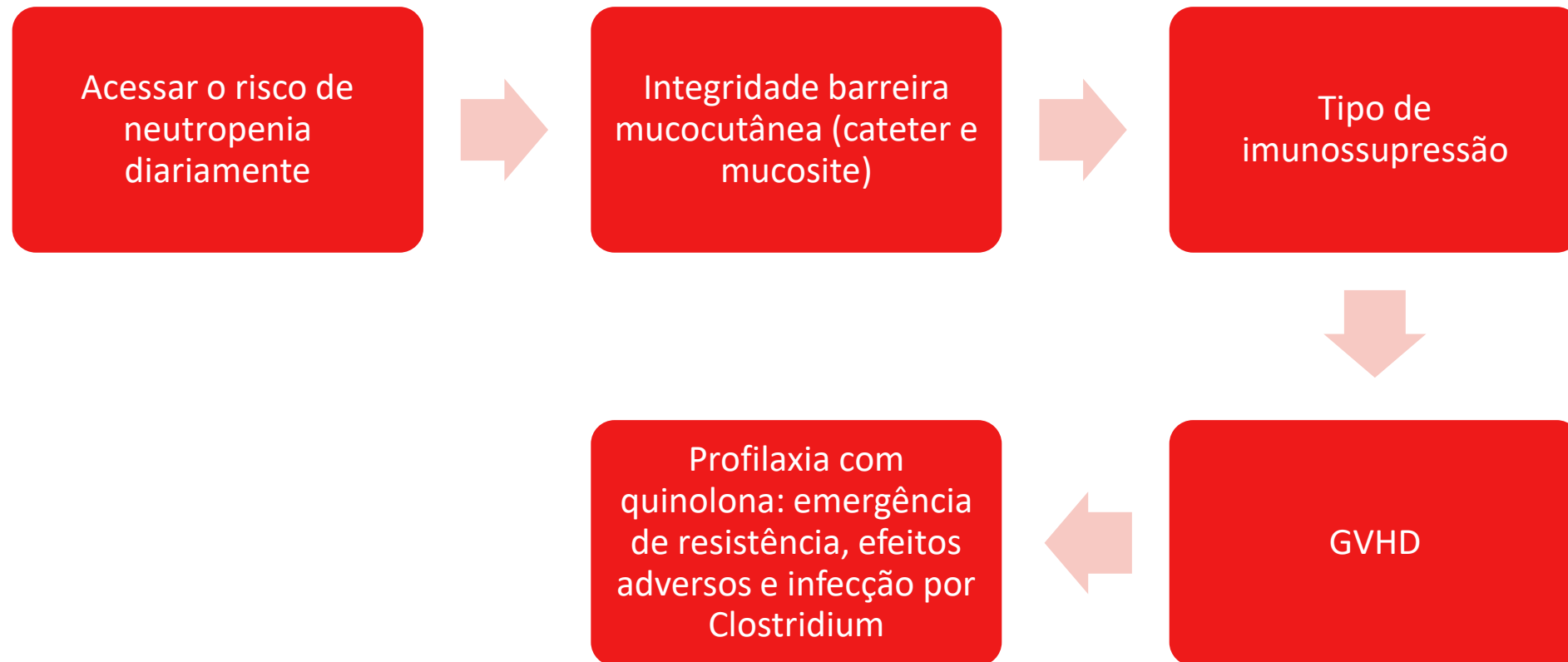
(Type: consensus-based; benefits outweigh harms; Evidence quality: intermediate; Strength of recommendation: moderate.)

Additional recommended precautions

Recommendation 4.1: All health care workers should comply with hand hygiene and respiratory hygiene/cough etiquette guidelines to reduce the risk for aerosol- and direct or indirect contact–based transmission of pathogenic microorganisms in the health care setting. (Type: consensus-based; benefits outweigh harms; Evidence quality: intermediate; Strength of recommendation: strong.)

Recommendation 4.2: Outpatients with neutropenia from cancer therapy should avoid prolonged contact with environments that have high concentrations of airborne fungal spores (eg, construction and demolition sites, intensive exposure to soil through gardening or digging, or household renovation). (Type: consensus-based; benefits outweigh harms; Evidence quality: intermediate; Strength of recommendation: strong.)

Considerações finais





Obrigada!

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