

epidermidis has been associated with persistent and recurrent bacteremia, and also with the need for IVD replacement,¹ which has an important impact in the management of patients.

Although there is not a single study that has specifically assessed BC TTP in oncology children, our data are consistent with prior reports in general pediatric^{5,7,8} and adult patients,^{4,9,10} in which most pathogens grew within the first 24 h of incubation. These data, together with patient clinical status, can be useful for taking management decisions, such as the need for ongoing antibiotic treatments or delays in chemotherapy schedules.

Our study had several limitations. We cannot assure that the time between collection of BC and placement in the incubator system was homogeneous (our protocol suggests less than one hour); therefore, we may have underestimated TTP in some cases. Depending on the age of the patient and other blood tests requested, the amount of blood available for each BC ranged from 1 to 4 ml, which does impact in TTP and also hinders comparisons.⁴ Nevertheless, both these facts reflect usual working conditions.

In conclusion, in pediatric oncology patients with IVD presenting with fever, clinically significant isolates almost universally grew within 24 h of first BC inoculation, as did 43% of contaminants. Since in our study, a first BC growth beyond 24 h mostly represented contamination, this 24-h cut-off promises to be a useful tool in the management of fever in this specific and difficult-to-manage population.

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Conflict of interests

The authors of this study have no conflict of interest in relation to their content.

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The use of co-trimoxazole in catheter lock therapy. A report on a difficult case[☆]



Uso de cotrimoxazol en sellado de catéter. A propósito de un caso en una situación difícil

Dear Editor,

Today, the use of long-term catheters to administer therapeutic agents (chemotherapy, antibiotic therapy, or blood or plasma derivatives), as well as the extraction of blood samples, is becoming increasingly common.^{1,2} Such devices avoid the need for repeated venipunctures, which are associated with discomfort for patients and derived complications (e.g. phlebitis, etc.). However, it is not uncommon that they lead to infections (bacterial or fungal).¹ The management of catheter-related infections is complex, as, on the one hand, removing the catheter decreases the options for vascular

access (which are often limited), while keeping it in place is associated with maintaining the focus of the infection. In some cases, an alternative option is used, consisting of both systemic treatment of the bacteraemia and the local administration of antimicrobial agents, known as “locks”.³ The examples of vancomycin (gram-positive cocci) and amikacin (gram-negative bacilli) are well established,² and there are efficacy data for other antimicrobial agents (e.g. amoxicillin-clavulanic acid or ciprofloxacin).^{2,4} Nevertheless, there are some circumstances in which the options are more limited due to the characteristics of the patient or the type of microorganism.

We report the case of a 51-year-old woman diagnosed with seronegative myasthenia gravis (MG) who underwent a thymectomy in February 2003. She subsequently required various hospital admissions due to myasthenic crises, including on one occasion to the ICU. She attended the Accident and Emergency Department due to presenting a fever of 40 °C, primarily in the evenings, accompanied by tremors for one month prior to admission. The patient had had a Port-a-Cath[®] (BARD) since 2005 for the administration of immunoglobulins, but did not report other signs of local involvement, such as the existence of pain, erythema or purulent discharge at the insertion site. On admission, and after taking blood cultures peripherally and from the catheter for study

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using qualitative methods via an automated system, a lock was created with vancomycin 4 mg/ml for 24 h (5 ml) and empirical intravenous treatment was started, avoiding antimicrobial agents contraindicated in patients with MG, with vancomycin (1 g/12 h) and ceftriaxone (1 g/12 h). Given the importance of quickly initiating an effective treatment, and because ceftriaxone is a time-sensitive antimicrobial agent, administration every 12 h was preferred. The fever remitted and the blood cultures revealed *Stenotrophomonas maltophilia* (*S. maltophilia*) and *Streptococcus agalactiae* (*S. agalactiae*) in the catheter and peripheral blood. In view of the bacterial growth times in the blood cultures, it was very likely that the catheter was the source of the bacteraemia. The treatment was later adjusted based on the antibiogram to co-trimoxazole (800/160 mg/12 h) given orally and vancomycin (1 g/12 h) administered peripherally to treat both microorganisms for 10 days. Due to their coexistence, a lock was created using two different antibiotics. *S. agalactiae* was susceptible to vancomycin, but for *S. maltophilia*, based on the patient's antibiogram and due to the restricted antimicrobial options available, only co-trimoxazole could be used for the lock. After performing a search of the literature, only a limited number of articles were found in which such a lock was used, the majority in vitro.^{4–7} Once informed consent had been obtained from the patient, the catheter lock was created by alternating 5 ml vancomycin-heparin (4 mg/ml) and 5 ml co-trimoxazole-heparin (10 mg/ml) for 12 h each. The blood cultures obtained from the catheter at 72 h, 7 days and 10 days were negative after 7 days' incubation. The intention was to substitute the vancomycin with linezolid (600 mg/12 h orally), but the patient reported nausea and it had to be withdrawn. At 30 days from the end of antibiotic treatment, blood cultures were taken and were negative.

The case presented illustrates a complex situation as *S. maltophilia* is not a microorganism normally encountered in bacteraemia and several of the drugs to which it is susceptible are contraindicated in MG. In this case, due to the patient's underlying illness, it was necessary to use an antibiotic lock for which there is practically no published experience. After reviewing the stability of the antimicrobial agent in the summary of product characteristics and always with the patient's consent, the decision was made to attempt its use before removing the catheter, with the result

that we were able to avoid the latter. We believe that catheter locks, including potential antibiotics other than those traditionally used, should always be taken into account together with systemic treatment.

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