BD DAYS – Sepsis:

Case Study - Time to decision in sepsis

6 September 2019
BD European HQ - Eysins, Switzerland

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Sepsis is time dependent[1]. The longer we wait to administer antibiotics, the higher the risk of mortality[1]. But overuse of antibiotics increases antibiotic resistance[2]. It is important to find a balance between early antibiotic treatment and overconsumption[2]. Dr Ferrer added that to avoid exacerbating resistance, we need to administer treatment rapidly, then de-escalate rapidly. He is a member of the Surviving Sepsis Campaign (SSC)'s executive committee[3]. The SSC *"encourages clinicians to act as quickly as possible to obtain blood cultures, administer broad spectrum antibiotics, start appropriate fluid resuscitation, measure lactate, and begin vasopressors if clinically indicated"* within one hour of sepsis identification[4].

Even with new technologies used to detect sepsis, Dr Ferrer felt that patients receive adequate treatment in the same amount of time as in the past. He decided to carry out an online survey[2] on time to decision in sepsis to test this hypothesis. The main objective of this survey was to describe the sepsis care pathway in Spanish hospitals. Dr Ferrer's team designed four versions of the survey for: emergency departments, intensive care units (ICUs), infectious disease departments and microbiology laboratories. Close to 700 healthcare professionals involved in sepsis care completed the survey.

The results of the survey show that there are ways to improve time to decision in sepsis. Dr Ferrer recommends standardising communication between laboratories and ICUs, expanding use of the sepsis code, implementing measures to prevent contaminated samples, having laboratories open 24/7 and using rapid diagnostic tests[2].

References
1. Ferrer R, Martin-Loeches I, Phillips G, et al. Empiric antibiotic treatment reduces mortality in severe sepsis and septic shock from the first hour: results from a guideline-based performance improvement program. *Crit Care Med.* 2014;42(8):1749–55. doi: 10.1097/CCM.0000000000000330.
2. Ferrer R. Case Study - Time to decision in sepsis. Presented at: BD DAYS – Sepsis; 6 September 2019; Eysins, Switzerland.
3. Surviving Sepsis Campaign. About SSC. Leadership. Accessed on 17 September 2019, at http://survivingsepsis.org/About-SSC/Pages/Leadership.aspx
4. Surviving Sepsis Campaign. Bundles. Accessed on 17 September 2019, at http://survivingsepsis.org/Bundles/Pages/default.aspx.

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