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Position statement

Sepsis and the Emergency Department

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Sepsis is defined as life-threatening organ dysfunction caused by a dysregulated host response to infection [1]. Sepsis is a life-threatening condition that arises when the response to an infection injures tissues and organs. Septic shock is a subset of sepsis in which underlying circulatory and cellular/metabolic abnormalities are profound enough to substantially increase mortality [2]. An article recently published in the Lancet has provoked some interest with regards to how sepsis may be presented in the media [3].

Patients attending the Emergency Department as a result of infection represent a significantly larger group than those attending with sepsis or septic shock. Whilst recognizing that the incidence of 'true sepsis' or septic shock is relatively low, RCEM acknowledges it is nonetheless a devastating illness and Emergency Departments have a key role in managing this condition through:

1. Ensuring a system for identification of the deteriorating patient. There is some evidence that deterioration is evident earlier physiologically (compared to sepsis screening), suggesting the importance of regular vital sign monitoring and use of an appropriate Early Warning Score
2. Ensuring a system for identification of patients who may have sepsis. There is controversy around which screening tool and how widely to apply it, however working with the organisation's sepsis team to determine which tool and improving compliance are important
3. Ensuring a system for identifying those patients who have severe sepsis, again some controversy exists around tools for this [4]
4. Ensuring a system for identification of high-risk patients e.g. neutropaenia, immunosuppression
5. Ensuring rapid treatment of those with sepsis: there is controversy regarding the benefit of rapid antibiotic treatment, and benefit of care bundles [3,4], however these are the mainstay of management
6. Ensuring audit of these processes, and sepsis care.
7. Ensuring compliance with minimisation of inappropriate antibiotic use*
8. Ensuring staff compliance with Infection Control (including hand hygiene and procedural) policies, and regular audit of this
9. Ensure compliance with Public Health requirements for epidemic and imported disease

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Those patients being discharged home (e.g. with oral antibiotics, or with a diagnosis of a viral infection (where antibiotics will not help)) should receive clear advice with regards what to do if their condition deteriorates and what specific signs to look out for.

*Whilst time to antibiotic for patients with Sepsis is an important measure; for those patients who do not have Sepsis it is important that merely having an abnormal early warning score is not used as an indication to give IV antibiotics 'just in case' or for a poorly chosen antibiotic. The dangers of over prescribing and inappropriate prescriptions of antibiotics have been well documented. [5,6]

References

1. Sepsis: recognition, diagnosis and early management. NICE 2017.
www.nice.org.uk/guidance/ng51 Accessed 14.11.2019
2. Seymour CW, Deutschman CS, Singer M et al. The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3). JAMA 2016; 315(8): 801-810.
doi:10.1001/jama.2016.0287
3. Singer M, Inada-Kim, Shanker-Hari M. Sepsis hysteria: excess hype and unrealistic expectations. Lancet. 2019; 394: 1513-1514 DOI:[https://doi.org/10.1016/S0140-6736\(19\)32483-3](https://doi.org/10.1016/S0140-6736(19)32483-3)
4. Kim HI, Park S. Sepsis: Early Recognition and Optimized Treatment. [Tuberc Respir Dis](#). 2019 Jan; 82(1): 6–4. doi: [10.4046/trd.2018.0041](https://doi.org/10.4046/trd.2018.0041)
5. Antimicrobial stewardship: systems and processes for effective antimicrobial medicine use. August 2015 www.nice.org.uk/guidance/ng15 accessed 14.11.2019
6. Start Smart - Then Focus. Antimicrobial Stewardship Toolkit for English Hospitals. Public Health England 2015.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/417032/Start_Smart_Then_Focus_FINAL.PDF Accessed 14.11.19