

hospitalization. Complications such as hypertensive pneumomediastinum, pneumopericardium, and mediastinitis can occur and patients should be monitored throughout their admission.

Take home message: In conclusion, spontaneous pneumomediastinum is a rare condition, and is known to have a favourable clinical course, with symptoms of pleuritic chest pain and dyspnoea improving within a few days. Chest CT is the gold standard radiological investigation to confirm diagnosis whereby measures must be taken to exclude secondary causes of SPM. Patients can be treated conservatively and must be monitored for life threatening complications.

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Successful multi-disciplinary management of a 24 year old pregnant woman with necrotising fasciitis of the forearm

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Introduction: Necrotising fasciitis is a relatively uncommon but rapidly progressive soft tissue infection. The incidence is 0.24–0.4 per 100,000.¹ This condition requires urgent aggressive surgical debridement and broad-spectrum antibiotics. Mortality from this condition has been quoted to be from 6–76%.² Sepsis can cause pre-term labour, fetal infection, and preterm delivery. The prevention of these complications is through early recognition and targeted therapy. This should include aggressive rehydration and broad-spectrum antibiotics, with an emphasis on stabilisation of the mother as a priority, as in doing so the foetal status will likewise improve.³

Case description: A 24-year-old woman who was 24 weeks pregnant presented to the emergency department with septic shock. She had injured the tip of her right elbow four days previously, causing a 0.5cm laceration which was now discharging pus. Her initial blood pressure was 84/43mmHg, heart rate 110 beat per minute, serum C-reactive protein (CRP) was 392mg/L, and white cell count (WCC) $32 \times 10^9/L$. She was initially given fluid resuscitation, and broad spectrum IV antibiotics. Through prompt coordinated prioritisation of the multi-disciplinary team, this lady was taken to theatre for prompt debridement. We found dirty dishwasher fluid, and pus above the fascial layer up to the wrist. She improved dramatically after this.

Results and Conclusions: We have presented a case of necrotising fasciitis in a 24 year old pregnant woman whom had extremely early broad spectrum antibiotics and radical surgical debridement. We feel this lady was prioritised by several teams and her efficient, early, coordinated management led to an excellent outcome for both mother and child. Necrotising fasciitis is an uncommon condition with a high morbidity and mortality. Our patient had no risk factors for necrotising fasciitis aside from pregnancy. This may imply as McHenry⁴ suggests, that pregnancy itself may cause an immunosuppressive state enough for it to be considered a risk factor for the disease.

Take home message:

- Necrotising fasciitis/necrotising soft tissue infection is a clinical diagnosis.
- Management in pregnancy is the same.
- Management includes broad spectrum antibiotics and very early aggressive surgical debridement.
- Senior surgical input should be sought early.
- This is very rare in pregnancy and there are no reported upper limb cases of necrotising fasciitis.

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Time from recognition of sepsis to treatment - A 2-month retrospective study of compliance of IV antibiotics at Queen's Hospital Burton

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Introduction: Sepsis is the presence (probable or documented) of infection. With its systemic manifestations of severe sepsis and septic shock posing a major healthcare burden in the UK and globally, there is clearly a potential for physician and patient awareness. Current evidence suggests that administration of appropriate antibiotic therapy within 1 hour on recognition of sepsis and its sequelae improves mortality rates among patients. In the UK, the National Institute of Clinical Excellence (NICE) and The Surviving Sepsis Campaign (SSC) recommends the use of intravenous antibiotics within the first hour of recognition of sepsis.

Case description: To determine the number of patients receiving their antibiotics within 1 hour from recognition of sepsis and to assess compliance of Queen's Hospital Burton Trust (QHBT) with the NICE and Surviving Sepsis Campaign's recommendation for early antibiotic therapy. A 2-month retrospective chart analysis was conducted to determine the interval from documented onset of sepsis to initial administration of antibiotic for patients at QHBT. Inclusion criteria included patients presenting to Accident and Emergency aged 16 and over scoring 4 or more on their NEWS (National Early Warning Chart Scoring) chart. Patients presenting to a paediatric and gynaecological/obstetric setting were excluded. Patients started on antibiotics at the GP were also excluded.

Results and Conclusions: Charts of 82 patients with documented sepsis were reviewed. 51 patients received their antibiotics within 1 hour representing 62% of all patients presenting to Accident and Emergency at QHBT over the 2 months period. At QHBT, over the 2-month period, very few patients receiving their antibiotics within 1 hour. Therefore, the administration of antibiotics in 38% of all patients exceeded the 1 hour period recommended by NICE and Surviving Sepsis Campaign guidelines. These results have been used as a baseline for future quality assurance and improvement initiatives aimed at minimizing the time to antibiotic administration for this group of patients, who are at high risk of death. Data have been shared with physicians, allied health professionals and patient groups at board meetings. A re-audit is in process with initial results looking promising.

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