

POSTPARTUM SEPTIC SHOCK: A CASE REPORT

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OBJECTIVE

- Sepsis is a leading cause of maternal morbidity and mortality globally and in the UK
- A case of postpartum septic shock who responded to antiviral treatment is reported here

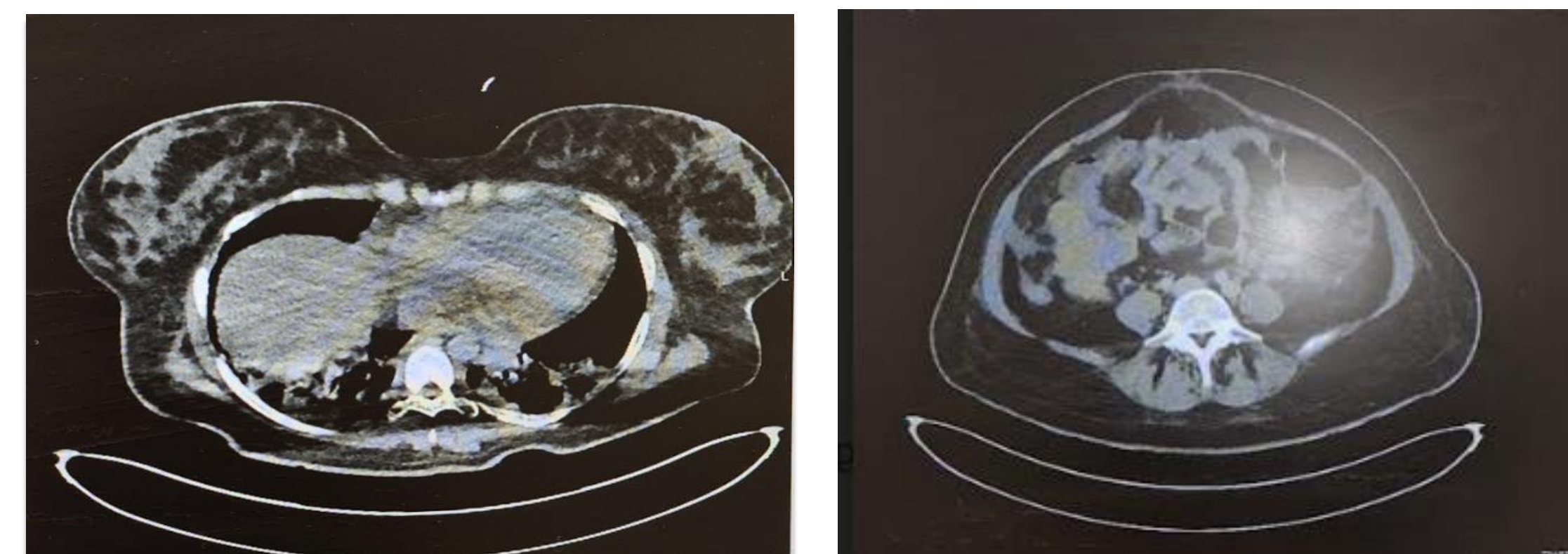
CASE REPORT

- A 24-year-old woman had an uneventful normal vaginal delivery with episiotomy and was discharged with no concerns.
- She presented to accident & emergency (A&E) four days later with imminent septic shock.
- The woman was admitted to the intensive care unit (ICU) commenced on inotropes and broad-spectrum antibiotics.
- Computed Tomography (CT) of abdomen was done (images attached) ,which showed moderate amount of free fluid / pus intra-peritoneally.
- Examination under anaesthesia (EUA) and exploratory laparotomy- undertaken in conjunction with general surgeon- was performed within 12 hours of admission and could not find any source of infection. Intra-op 900 ml of straw-coloured fluid was drained from the peritoneal cavity.
- Antivirals were added on the first-day post laparotomy as she remained unresponsive to intravenous (IV) antibiotics. Blood cultures, peritoneal fluid & vulval/vaginal fluids were negative for any pathogen.
- Management and anti-microbial planning was done in conjunction with the Microbiologist.
- On day 5 post-laparotomy, CT head and Lumbar puncture (LP) were performed as she had low Glasgow Coma Scale (GCS) without sedation.
- CT head was normal, however, Herpes simplex virus 1 (HSV1) was detected in the cerebrospinal fluid (CSF). A gradual improvement was observed and the woman was extubated on day 8 postoperative.
- After completion of 21 days of IV Acyclovir, the woman was discharged home.

DISCUSSION

- Sepsis and septic shock occur when pathogen results in multi-organ dysfunction and are leading causes of ICU admission and maternal deaths.
- The most common site of sepsis is the genital tract & the most common postpartum infection is endometritis.
- The negative laparotomy and no response to antibiotics, in this case, prompted the initiation of antiviral- IV acyclovir.
- The unusual presentation in this case and recent notification of maternal deaths from HSV type 1 sepsis prompted early commencement of acyclovir.
- In the reported cases of maternal deaths, there was a significant delay in the initiation of acyclovir in one case. In the other case, the infection was diagnosed postmortem so antiviral treatment was not considered at all.

CT IMAGES



Moderate amount of free intra- abdominal fluid, possibility of inter mixed blood products from an unknown source.

CONCLUSION

- This was an unusual case of rapidly deteriorating postpartum septic shock
- Early recourse to acyclovir proved life-saving in this case
- Virology culture for herpes simplex virus was positive in CSF in the local laboratory but not confirmed in the regional lab.
- Despite being the gold standard, only 30-40% blood cultures will be positive in severe sepsis with HSV
- In view of the HSV sepsis related maternal deaths, RCOG recommends that that viral infections must routinely be considered as a possible cause of postpartum infection.

REFERENCES

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